Annual Report

of the

Supplies of Water available for Irrigation Works and of the Discharge from Catchment Areas in the Bombay Presidency

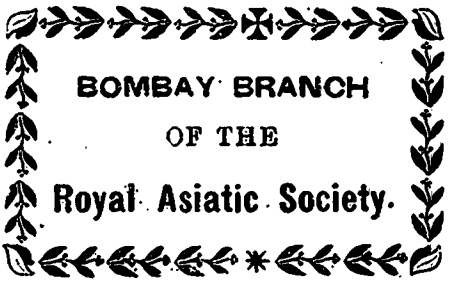
For the Year 1926

[Price—Rs. 6 As. 2 *or* 10*s*.]

00133258

BOMBAY
PRINTED AT THE GOVERNMENT CENTRAL PRESS
1928

Obtainable from the Superintendent of Government Printing and Stationery, Bombay; from the High Commissioner for India, 42 Grosvenor Gardens S.W.1, London; or through any recognized Bookseller



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In paragraph 11 of a note dated 20th June 1906 the Inspector General of Irrigation required the following information regarding projects to be given :—

(*a*) Names and location of projects.

(*b*) Position and date of institution of existing river gauges for each project.

(*c*) Position of additional river gauges which it is now considered expedient to institute.

(*d*) Present procedure as to the observation of river discharges in case of rivers now gauged for new projects and that which is proposed in future with regard to these and others on which it may be considered expedient to establish gauges.

In paragraph 12 of the same note the following were required :—

(*i*) An index map to the scale of 8 miles to one inch in folded mounted sheets of convenient size, with the location of hills indicated by shading and showing as far as possible the following particulars with regard to each project :—

(*a*) Serial number.

(*b*) Configuration of catchment area where determined, otherwise the location to be indicated.

(*c*) Position of all existing rainfall stations : these to be indicated in a distinctive manner.

(*d*) Position of all proposed additional rainfall stations : these to be also shown in a distinctive manner and differently from (*c*) *supra*.

(*e*) Alignments of existing canals.

(*f*) Alignments of proposed canals in cases in which determined, and in which the length exceeds 10 miles.

(*g*) Location of existing river gauges which concern new projects, and sites proposed for additional gauges for the larger projects.

(*h*) Drainage features of the country, town and village sites and other topographical features usually shown on maps of this scale.

(*ii*) A tabular statement of projects giving the following information :—

(*a*) Serial number as on the index map.

(*b*) Name of projects.

(*c*) Catchment area in square miles when determined.

(*d*) Number of rainfall stations within the catchment area.

(*e*) Additional number of rainfall stations proposed within the catchment area.

(*f*) Frequency of river discharge observations in the past.

(*g*) Proposed frequency of river discharge observations in future.

(*h*) Remarks.

(*iii*) A report showing that the proposed arrangements will be adequate.

STATEMENT I.

Position of River Gauges in Sind.

Report as per paragraph 11 of the Note, dated 20th June 1906, by the Inspector-General of Irrigation.

(11*a*).—The requisite information is given in the accompanying map of Sind.

(11*b*).—The following are the permanent river gauges fixed on the Indus for recording the heights at high and low water seasons :—

	Position of the Indus River gauges.	Date of institution.	Projects for which gauges will be useful.	Remarks.
1.	A gauge about 1,000 feet below the Desert Canal mouth on the Right Bank.	1908 ..	(1) Proposed Khelat Canal.	
2.	A gauge opposite the Desert Canal on the Left Bank.	1909 ..		
3.	A gauge between the Desert Canal and the Unharwah situated opposite mile 34/6 of the Kashmor Bund on the Right Bank.	1909 ..		
4.	A gauge at the mouth of the Unharwah on the Right Bank.	1908 ..	Gauges from 1 to 8 are useful for raising Right Bank Bunds above Sukkur and Left Bank Protective Bund above Rohri.	
5.	A gauge at the new mouth of the Begari Canal (Right Bank).	1913 ..		
6.	A gauge at the mouth of the new feeder to the Sind Canal on the Right Bank.	1909 ..		
7.	A gauge about 800 feet above the mouth of the Rajib Canal on the Right Bank.	1908 ..		
8.	Bukkur gauge on the Bukkur Island situated in the Indus opposite Sukkur.	1848 ..		
*9.	Sadh Belo gauge on the Sadh Belo Island situated about 1 mile below the Bukkur Island in the Indus.	1898 ..	Gauges from 8 to 11 are useful for— (1) Lloyd Barrage. (2) Right Bank Canal. (3) Eastern Nara Canal. (4) Rohri-Hyderabad Canal.	*The name Sadh Belo has been adopted from the year 1922 as it is the correct name of the island on which the gauge is fixed.
10.	Outfall gauge in the Bunder wall at Sukkur about 3,642 feet below Gao Ghat gauge on the Right Bank.	1903 ..		
11.	Bhagotoro gauge about a mile and a quarter above Laki Railway Station at the mouth of the Aralwah on the Right Bank.	1907 ..		
12.	A gauge 1,000 feet above Jamshora Head Regulator over the Fuleli Canal and about ¼th mile from the river on the Left Bank.	1904 ..	Improvements of Fuleli Canal.	
13.	Kotri gauge at Kotri opposite Sub-divisional Office, Indus River Commission, on the Right Bank.	1863 ..	(1) Kotri Barrage. (2) Improvements of Fuleli Canal.	
14.	Mehrani gauge about 7½ miles below Kotri on the Left Bank.	1904.	(3) Eastern Delta Canal.	
15.	Naro gauge about 13 miles below Kotri on the Left Bank.	1904.		
16.	Hajipur gauge about 2½ miles below Naro gauge on the Left Bank.	1904.		
17.	Hassanali gauge at the mouth of the Hassanali Canal on the Left Bank.	1904.		
18.	Jerruck gauge about 30 miles below Kotri on the Right Bank.	1900 ..	(1) Jerruck Barrage. (2) Baghar re-modelling.	
19.	Uchito gauge at the mouth of the Gharowah on the Right Bank of the Uchito River.	1906 ..	Tidal gauge.	
20.	Chowgazo gauge at the mouth of the Chowgazowah on the Left Bank of the Haideri River.	1906 ..	Do.	

(11*c*).—Nil.

(11*d*).—Discharges of the Indus were observed at Mithankot, Sukkur and Kotri and a comparison of the gauging at Sukkur and Mithankot

STATEMENT I—*contd.*

below the junction of the Chenab with the Indus gives the following results :—

Name of gauging station.	Average daily discharge in each month.					
	May 1926.	June 1926.	July 1926.	August 1926.	September 1926.	October 1926.
	Cusecs.	Cusecs.	Cusecs.	Cusecs.	Cusecs.	Cusecs.
(1) Mithankot below the junction of the Chenab with the Indus.	109,183	*	*	*	378,411	88,049
(2) Sukkur	100,298	174,991	276,125	480,447	358,281	96,364
Difference	8,885	—	—	—	20,130	−8,315

Name of gauging station.	Average daily discharge in each month—*concld.*					
	November 1926.	December 1926.	January 1927.	February 1927.	March 1927.	April 1927.
	Cusecs.	Cusecs.	Cusecs.	Cusecs.	Cusecs.	Cusecs.
(1) Mithankot below the junction of the Chenab with the Indus.	72,756	38,461	33,168	27,379	26,494	40,729
(2) Sukkur	52,187	39,836	34,430	30,208	29,104	38,996
Difference	20,569	−1,375	−1,262	−2,829	−2,610	1,733

* Observations not taken.

Discharges at Mithankot, Sukkur and Kotri were measured daily and silt and velocity observations were taken twice a week. Before 1925 the only meter used for discharge purposes was Haskill's current meter type 'B.' Gurley meters were introduced in the cold weather of 1925 as they give more reliable results than Haskill for velocities lower than 1·6 feet per second. Velocities observed at 6/10th of the depth at each station have been taken as the mean velocity of discharge.

Discharges at Ghazi Ghat and Panjnad, which were recorded by the Government of the Punjab, were as under :—

Name of gauging station.	Average daily discharge in each month.					
	May 1926.	June 1926.	July 1926.	August 1926.	September 1926.	October 1926.
	Cusecs.	Cusecs.	Cusecs.	Cusecs.	Cusecs.	Cusecs.
Ghazi Ghat (Dera Ghazi Khan) ..	70,510	118,564	234,584	311,327	193,532	67,977
Panjnad	53,532	72,986	130,216	254,835	184,073	80,648

Name of gauging station.	Average daily discharge in each month—*concld.*					
	November 1926.	December 1926.	January 1927.	February 1927.	March 1927.	April 1927.
	Cusecs.	Cusecs.	Cusecs.	Cusecs.	Cusecs.	Cusecs.
Ghazi Ghat (Dera Ghazi Khan)...	37,842	20,108	24,918	25,133	24,781	35,903
Panjnad	13,006	8,312	6,615	5,465	5,864	10,674

STATEMENT II.

SIND.

Statement of Gauges at Head Regulators of Canals.

Gauges at the Head Regulators of Canals.	Date of institution.	Projects for which useful.
1. Desert Canal	1877 ..	Proposed Khelat Canal.
2. Unharwah	1885 ..	Right River Embankment above Sukkur.
3. Begari	1879 ..	(1) Right River Embankment above Sukkur. (2) Begari Canal.
4. Sind Canal	1898 ..	Right River Embankment above Sukkur.
5. Sukkur Canal (Rahuja Head)..	1875 ..	(1) Right Bank Canal from Sukkur. (2) Lloyd Barrage.
6. Nara, Upper	1862 ..	(1) Left Bank and Eastern Nara System of Canals. (2) Lloyd Barrage.
7. Ghar	1879 ..	(1) Right Bank Canal from Sukkur. (2) Right River Embankment below Sukkur.
8. Western Nara, Akil Mouth ..	1904 ..	(1) Right Bank Canal from Sukkur. (2) Right River Embankment below Sukkur.
9. Pritchard	1890 ..	(1) Right Bank Canal from Sukkur. (2) Right River Embankment below Sukkur.
10. Pinyari	1882 ..	(1) Kotri Barrage. (2) Eastern Delta Canal. (3) Left River Embankment below Kotri.
11. Kalri	1895 ..	(1) Right Bank Canal below Kotri Barrage. (2) Right River Embankment below Kotri.
12. Baghar	1868 ..	(1) Right Bank Canal below Kotri Barrage. (2) Right River Embankment below Kotri. (3) Baghar Canal.
13 Fuleli Canal Jamshora ..	1889 ..	(1) Kotri Barrage. (2) Fuleli Canal. (3) Left River Embankment.
14. Dad	1897 ..	Left River Embankment below Sukkur.
15. Sehar	1901 ..	(1) Sehar Canal. (2) Left River Embankment.
16. Mahi	1901 ..	(1) Mahi Canal. (2) Left River Embankment.
17 { Masu	1898 ..	(1) Ghotki Canal.
17 { Maharo	1898 ..	(2) Left River Embankment.

STATEMENT III.

Table showing Projects in Gujarat with the particulars called for in paragraph 11 of the Note, dated 20th June 1906, by the Inspector-General of Irrigation.

FOR WORKS WITHOUT STORAGE.

Serial No.	Project.		River Gauge.		
	Name.	Location.	Position.	Date of erection.	Present procedure of observing river discharges.
			GUJARAT.		
1	Dharoi Reservoir Project and Sabarmati Canal Project.	Mahi Kantha Agency and parts of Baroda territory.	At Hadol about a mile eastwards on the Sabarmati River.	1904-05 ..	In rainy season the rivers are gauged twice a day and for the rest of the year once a day, except the rivers Meshwa, Watrak and Mohor, which are gauged weekly when the discharge is reduced to 15 cusecs.
2	Sabarmati Canal Project.	Daskroi, Sanand and Dholka Talukas of the Ahmedabad District.	At Dudheshwar, ½ mile downstream of Railway Bridge on the Sabarmati River.	1901.	
3	Mahi Canal Project.	Thasra, Anand, Nadiad and Matar Talukas of Kaira District and part of Baroda territory.	At Pali about a mile upstream of the Railway Bridge on the Anand-Godhra Line on the Mahi River.	27th August 1904.	Gauge readings are taken during flood and the surface velocities observed by means of floats; soundings are taken in addition when the river stream is low.
4	Do. ..	Do. ..	At Railway bridge near Lunawada on Panam River, *vide* remark for Serial No. 9 of Statement V.	14th September 1907.	
5	Meshwa Canal Project.	Mehmedabad and Matar Talukas.	At Harsol on Meshwa River.	1905.	
6	(On Mohor River.)	For project that may be contemplated in future.	Near Kapadvanj on Dakor-Kapadvanj Road Bridge on Mohor River.	1907.	
7	(Watrak River.)	Do. ..	Near Ratanpur on Watrak River.	1907.	
8	Tapti River ..	....	At Dholan Pardi.	25th April 1901.	The gauge readings on the rivers Tapti and Narbada are taken for 7 months only (1st November to 31st May) and the river discharges calculated, the surface velocity being observed by means of bottle floats.
9	Narbada River..	....	Gurdeshwar ..	19th November 1905.	

STATEMENT IV

STATEMENT

Tabular Statement of Projects giving the information required by General

STORAGE WORKS

Serial Number as per Index Map.	Name of Project.	Catchment area in square miles where determined.	Number of rainfall stations within the catchment area.
a	*b*	*c*	*d*
			GUJARAT.
17	Hathmati Reservoir Project	224	*Nil* ..
18	Sabarmati Canal and Dharoi Reservoir Project.	3,400	6 ..
19	Mahi Canal Project (Panam River)	11,840	3 in British Territory .. / 7 in Native States ..
20	Khari Reservoir Project	310	2 ..
			DECCAN.
1	Nasik Left Bank Canal, Gangapur Tank ..	146	3 at Trimbak, Vaghra and Girnara.
2	Godavari Canals (Darna Storage)— Unanda Storage at Wajarkhed	68	2 at Achala Fort and Wajarkhed.
	Kadva Storage at Karanjawan	96	2 at Charosa and Kosimba.
	Aundh Storage at Mukhne	52	1 at Kusegaon ..
3	Darna Right Bank Canal— Karwa Storage at Pimpalgaon	67	2 at Indori and Taki B ..
4	Pravara River Project	47	2 ..
5	Mula Right Bank Canal— Mula Storage at Chas	171	4 at Harischandragad, Pachnai, Kotul and Chas.
	Mula Storage at Mandvi	538	As above ..
	Mula River at Rahuri (no storage proposed) ..	852	Do. ..
6	Kukari Left Bank Canal— Kukari Storage at Pimpalwandi and Ghod Storage.	288	4 at Junnar, Pur, Malsej and Utur.
7	Mina Canals— Mina Storage at Wadgaon	65	2 at Shewali and Dhamankhed.
8	Ghod Right Bank Canal— Ghod Storage at Nirgudsar	284	4 at Ghod, Asane, Manchar and Anpa.
9	Bhima Canals— Bhima Storage at Kaman	140	3 at Bhimashanker, Wade and Kaman.
10	Mutha Canal Extension Project— Lake Fife	196	4 Musa, Garli, Mutha and Yegra.
11	Nira Right Bank Canal— Yetwandi (raised) Storage at Bhatghar ..	128	3 at Bhatghar, Bhordi and Rajgad.
	Nira Storage at Vir	635	5 at Nigurghar, Shirgaon, Margasai, Torna Fort and Khed Shivapur.

IV.

paragraph 12 (ii) of the note, dated 20th June 1906, by the Inspector of Irrigation.

AS PROPOSED.

Additional Number of rainfall stations proposed in the catchment area. *e*	Frequency of river discharge observations in the past. *f*	Frequency of river discharge observations in the future. *g*	Remarks. *h*
Nil ..	Gauged over the weir daily since 1886.	Daily ..	Observations have been taken since the construction of the weir in 1873-74.
Do. ..	Gauged daily since 1901 ..	Daily since 1904.	
Do. ..	Gauged daily since 1904 ..	Do.	
Do. ..	Gauged daily since 1893 ..	Daily ..	Observations are being taken daily in monsoon and weekly at other times since 1893.
Nil ..	Twice a day, 1st June to 31st December.	Same as in column *f*.	
Do. ..	1st June to 31st December	Do. ..	Completed. These are all in connection with increased supply to the Godavari Valley system in Nasik.
Do. ..	Do. ..	Do. ..	
Do. ..	Do. ..	Do. ..	
Do. ..	Do. ..	Do.	
Do. ..	*Nil* ..	Do. ..	Completed.
Do. ..	Do. ..	*Nil.*	
Do. ..	Whole year ..	Same as in column *f*.	The river gauge is at Tas not far below Mandvi.
Do. ..	1st June to 31st December.	Do. ..	This is the continuation of an old gauge and is useful if the proposal of a weir above Rahuri should be revived.
Do. ..	Do. ..	Do.	
Do. ..	Do. ..	Do. ..	Some of this water may be given to the Kukari Left Bank Canal.
Do. ..	Do. ..	Do. ..	Do. do.
Do. ..	Do. ..	Do.	
Do. ..	Whole year over 30	years available.	
Do. ..	Whole year ..	Same as in column *f*.	Under construction.
....	Do. ..	Do.	

STATEMENT

Serial Number as per Index Map.	Name of Project.	Catchment area in square miles where determined.	Number of rainfall stations within the catchment area.
a	*b*	*c*	*d*
			DECCAN—*concld.*
12	Krishna Extension Project at Kamargaon ..	346	13, *viz.*, at Malcolmpeth, Panchgani, Dhom, Wai, Sonar, Medha, Bomnoli, Kas, Satara, Rewadi, Koregaon, Helwak and Patan.
13	Gokak Extension Project (Ghataprabha Project)	1,080	15, *viz.*, Ajra, Hukeri, Gadhinglaj, Chandgad, Tambulwadi, Punara, Amboli, Hattargi, Bonalli, Tankeshwar, Gausa, Waghotra, Rajgoli, Adkur and Patna.
14	Ghataprabha Right Bank Canal	410	8, *viz.*, Amboli, Punara, Adkur, Waghotra, Chandgad, Patna, Rajgoli and Tambulwadi.
	Harankashi Storage at Ajra	94	2 at Ajra and Gausa ..
	Ghataprabha Storage at Hadlag	134	3 at Amboli, Punara and Adkur.
	Tamraparni Storage at Rajgoli	206	5 at Waghotra, Patna, Chandgad, Rajgoli and Tambulwadi.
15	Malaprabha Project— Malaprabha Storage at Asoga	116	2 at Kankumbi and Jamboti
	Malaprabha Storage near Khanapur ..	179	1 at Khanapur ..
16	Wardha Project unknown	....	....
21	Madag Canal Right Bank Extension ..	540	*In the catchment area of the Tank.* 1 at Kalomani.
23	Girna	1,826	....

IV—*concld.*

Additional number of rainfall stations proposed in the catchment area.	Frequency of river discharge observations in the past.	Frequency of river discharge observations in the future.	Remarks.
e	*f*	*g*	*h*
Nil ..	1st June to 31st December.	Same as in column *f*.	
Do. ..	Throughout the year ..	....	
Do. ..	1st June to 31st December.	....	
Do. ..	Do. ..	Same.	
Do. ..	Do. ..	Do. ..	The Ghataprabha storage at Daddi combines these two in one, and although the catchment area is increased to 410 square miles, the river discharge would be about the same as the sum of these.
Do. ..	Do. ..	Do. ..	
Do. ..	....	1st June to 31st December.	At dam site.
		Whole year ..	Below junction of river near Khanapur.
Do. ..	....	....	
Do. ..	....	....	Gauging started in July 1908.
Do. ..	Discharge of the river near Belur was taken once a day from 1870 to 1893 and then discontinued. The discharge of the waste weir of the existing small tank has been taken once a day whenever it overflowed from 1893.	Discharge to be taken once a day.	Reasons why more rain gauges are not proposed are that the waste weir overflows continuously with an average flood depth of 5 feet for about 4 months in the year, and the discharge is measured.
....	Daily since 1871, with the exception of 4 years of incomplete record.	Daily at Jamda Weir.	Storage at Panjhan, 1,826 square miles catchment. River gauging at Jamda Weir, 2,389 square miles catchment, but the addition is not Ghat catchment.

STATEMENT

Abstract Statement of yearly Discharges of

Serial No.	Project Number as per map.	Name of river and site.	Catchment area above site.	1907.	1908.
			Sq. miles.	M. c. ft.	M. c. ft.
					GUJARAT
1	18	Sabarmati near Hadol ..	3,400	22,363	120,212
2	18	Sabarmati near Dudheshwar ..	4,282	27,455	108,176
3	17	Hathmati near Himatnagar (Ahmednagar, Idar).	524	11,241	79,752
4	20	Khari near Raipur ..	310	(3,065—1,194)* =1,871	4,104†
5	..	Meshwa near Harsol ..	422	6,906	9,766
6	..	Watrak River near Ratanpur ..	611	..	5,315
7	..	Mohor River near road-bridge over Nadiad-Kapadvanj Road.	225	..	995
8	19	Mahi near Pali ..	11,840	291,866	224,105
9	..	Panam at Railway bridge near Lunawada.	977	..	42,400
					CENTRAL INDIA
10	..	Narbada at Gurdeshwar ..	42,350	13,632	..

Note.—The observations made pertain
References to the signs * etc., which are not given on the

V.

Rivers in the Deccan and Gujarat.

1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.
M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
CATCHMENT.								
40,482	65,674	3,546	20,087	25,729	18,664	3,848	42,157	49,622
49,826	51,564	7,557	25,781	37,582	28,415	9,949	44,401	76,754
28,081	6,989	2,723	4,678	8,444	4,662	1,008	14,267	16,903
3,150	2,890	634	2,635††	1,524	4,670	984	752	3,908
10,979	7,442	623	11,942	11,358	18,270	754	3,598	5,062
5,503	6,167	1,617	5,800	16,379	40,304‡	1,698	4,491	11,518
2,016	2,072	*Nil.*	815	2,016	2,203	407	1,421	4,987
369,970	453,239	38,159	335,684	685,046	237,110	42,974	641,154	801,221
14,104	31,520	2,037	45,669	139,053‡	16,337	7,833	17,407	41,577
CATCHMENT.								
286,527	99,713	154,243	133,803	79,449	66,861	41,265	29,032	94,676

to the period 1st May to 30th April following.
same page will be found in the remarks column of the statement. ‡ Doubtful.

STATEMENT

Serial No.	Project Number as per map.	Name of river and site.	Catchment area above site.	1907.	1908.
			Sq. miles.	M. c. ft.	M. c. ft.
11	..	Arunawati at Karwand ..	250	DECCAN 841	(DECCAN 582
12	..	Tapti at Dholan Pardi ..	26,015	CENTRAL 4,944	INDIA ..
13	..	Aner at Ganpur ..	502	DECCAN 2,999	(GHAT 4,567
14	..	Tapti at Kathora ..	12,371	CENTRAL ..	INDIA 109,445
15	..	Kan at Khandbara ..	34	DECCAN 1,710	(DECCAN 2,071
16	..	Waghur at Raipur ..	700	8,419	6,881
17	..	Panjra at Pankheda ..	52	DECCAN 2,303	(GHAT 2,405
18	..	Panjra near Nyhalod ..	802	15,204	24,178
19	..	Panjra near Dhulia ..	714	14,952	21,526
20	..	Bori at Purmapada ..	117	DECCAN 856	(DECCAN 731
21	..	Mosam at Sangameshwar ..	332	DECCAN 8,929	(GHAT 5,500
22	..	Girna at Thengoda ..	413	..	..
23	23	Girna at Jamda ..	2,389	16,918	32,421
24	23	Girna at Rahipuri ..	2,389	..	..
25	..	Manad at dam site (Saygaon) ..	342	DECCAN 289	(DECCAN 582
26	2	Unanda at Wazerkhed ..	88	DECCAN 3,167	(GHAT 2,014
27	2	Kadwa at Karanjwan ..	96	10,011	8,359
28	..	Odal at Khadakozath ..	38	DECCAN 651	(DECCAN 302
29	2	Kadwa at Palkhed ..	314	DECCAN 36,383	(GHAT 20,214
30	1 & 2	Godavari at Gangapur ..	145	14,590	9,893
31	2	Godavari at Nandur-Madhmeshwar.	1,650	106,455	103,591

✕ Discharges observed not reliable.

V—*contd.*

1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.
M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
CATCHMENT).								
2,079	7,000	242	522	4,958	19,732	925	3,504	206‡
CATCHMENT.								
80,054	29,554	22,276	13,386	14,730	11,631‡	14,570	5,986	97,994
CATCHMENT).								
1,695	4,320	1,155	4,785	20,981‡	17,458	9,552‡	16,966	12,599
CATCHMENT.								
62,464	236,988	62,858	79,928	208,535	189,114	101,927	233,767	219,103
CATCHMENT).								
1,167	2,405	668	1,750	2,377	2,379	1,113	1,183	4,486‡
5,344	3,479	664	2,153	4,319	8,293	4,670	7,371	6,459
CATCHMENT).								
2,635	2,820	861	4,322	2,407	6,848	2,626	5,143	5,102
36,491	39,300	1,549	30,053	×	21,443	6,024	8,019	7,670
27,270	31,800	1,852	19,234	×	10,352	3,902	6,729	14,720
CATCHMENT).								
1,392	5,697	903	2,976	×	2,875	1,512	24,605‡	4,190
CATCHMENT).								
8,952	8,710	3,310	6,771	2,343	15,290	14,832	13,976	21,974
14,436	11,576	12,190	9,888	20,865	35,470	13,703	14,428	24,154
22,943	42,076	8,745	39,089	34,169	44,717	17,847	×	30,863
..	..	..	..	..	..	..	..	28,166
CATCHMENT).								
1,788	2,494	1,597	3,025	2,925	5,642	3,726	8,883	2,639
CATCHMENT).								
3,864	4,944	1,690	2,979	3,227	17,719	3,154	2,257	3,554
10,437	7,536	3,671	9,662	14,462‡	24,682	7,471	8,025	7,683
CATCHMENT).								
1,474	2,179	1,011	1,615	732	5,043	4,378	6,116	1,000
CATCHMENT).								
15,685	19,691	12,173	37,186	26,229	62,888	28,591	22,949	36,908
10,234	7,918	5,394	17,432	21,879	22,389	12,635	12,299	14,768
56,806	94,289	21,692	47,773	59,618	109,330	62,051	85,289	64,071

‡ Doubtful.

STATEMENT

Serial No.	Project Number as per map.	Name of river and site.	Catchment area above site.	1907.	1908.
			Sq. miles.	M. c. ft.	M. c. ft.
				DECCAN	(GHAT
32	2 & 3	Darna at Nandgaon ..	156	36.187	17,378
33	2 & 3	Aundha Nala at Mukhne ..	52	10,898	5,313
34	2 & 3	Karwa at Pimpalgaon ..	67	4,880	4,045
35	4	Pravara at Ojhar Weir ..	621	27,387	38,767
36	5	Mula at Chikalthan ..	581	39,601‡	40,215
37	5	Mula at Rahuri ..	900	36,879‡	44,090
38	6	Kukari at Edgaon ..	265	29,007	24,742
39	7	Mina at Wadgaon ..	78	7,162	2,861
40	8	Ghod at Nirgudsar ..	284	39,610	47,852
41	..	Ghod at Kathapur ..	427	..	..
42	6	Kukari at Shirapur ..	464	28,943	32,456
43	9	Bhima at Chas-kaman ..	140	18,155	24,064
44	10	Lake Fife at Khadakvasla ..	196	Transferred to State	
45	11	Yelwandi at Bhatghar (Lake Whiting).	128	Transferred to State	
				DECCAN	(DECCAN
46	..	Scena at Hatwalan ..	446	4,724	1,369
				DECCAN	(GHAT
47	11	Gunjawni at Mohori ..	183	28,151	25,039
48	..	Nira at Apti (formerly called Nira at Natambi).	59	..	..
49	11	Nira at Karanja ..	86	20,525	20,363
50	11	Nira at Vir ..	700	102,380	103,998
51	12	Krishna at Dhom ..	84	28,110	26,160
				DECCAN	(DECCAN
52	12	Yerla at Yeralwadi ..	274	8,479	4,621
				DECCAN	(GHAT
53	12	Koyna at Helwak ..	359	173,655	188,795

V—*contd.*

1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.
M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c.ft.
CATCH	MENT).							
13,773	Figures	from 1910	transferre	d to State	ment VI.		..	..
14,971	11,955	2,691	13,521	4,285	9,938	3,253	3,703	3,892
4,306	8,632	2,403	6,172	7,558	14,701	5,976	6,868	3,570
36,011	33,633	17,708	26,927	29,817	47,085	28,012	40,958	48,354
34,156	55,049‡	27,959‡	45,466‡	56,405	70,029‡	47,381‡	49,586‡	30,194
42,171	49,370	24,564‡	35,865‡	63,688‡	59,286‡	41,269‡	57,028‡	34,858
24,255	26,470	19,240	22,334	48,499‡	41,942	26,574	40,777	30,248
4,260	6,364	5,548	10,157	11,042	17,710‡	9,195‡	14,814	6,535
42,006	53,493	17,948	57,661	47,624	45,700	29,744	41,479	18,125
..	..	..	..	..	..	..	..	..
32,023	35,123	24,073	31,733	41,334	95,228	64,562	84,854‡	29,872‡
13,360	31,054	21,263	37,500	50,444	31,006	16,718	18,048	14,341
ment VI.								
ment VI.								
CATCH	MENT).							
3,172	10,364	2,913	1,489	7,653	6,855	4,663	12,593	4,152
CATCH	MENT).							
21,851	27,081	7,704	21,449	24,506	31,344	21,549	12,704	24,716
..	..	..	..	..	..	..	..	..
18,806	25,963	9,968	15,583	29,324	25,823	14,411	23,390	24,229
83,392	90,755	51,956	81,890	82,230	127,661	91,370	63,950	85,122
21,232	44,183	14,077	35,855	29,721	45,737	31,189	17,477	15,926
CATCH	MENT).							
5,423	6,078	3,130	4,193	4,095	3,236	3,340	6,094	2,361
CATCH	MENT).							
177,940	167,482	108,226	76,623	152,291	236,457	134,472	139,084	130,530

‡ Doubtful.

STATEMENT

Serial No.	Project Number as per map.	Name of river and site.	Catchment area above site.	1907.	1908.
			Sq. miles.	M. c. ft. DECC	M. c. ft. AN (GHAT
54	..	Krishna at Khodsi Weir ..	*1,322	82,745	90,018
55	12	Krishna at Kusnal ..	7,299	..	o ..
56	13	Harankashi at Ajra ..	94	42,172	48,862
57	13 & 14	Ghataprabha at Hadlag ..	134	50,289	50,538
58	13 & 14	Ghataprabha at Gokak or Dhupdal Weir.	††1,080	153,913	155,933
59	13 & 14	Tamraparni at Rajgoli ..	206	36,614	37,886
60	14	Markandya at Shirur ..	165	8,398	8,135
61	15	Malaprabha at Bhutewadi ..	126	30,181	21,657
62	15	Malaprabha at Khanapur ..	179	32,293	24,407
63	16	Wardha at Banwasi (Bhasi) ..	444	..	47,661
64	22	Dharma near Shringeriwad ..	§§60	..	1,070
65	21	Kumudvati River, Bellur village, and Madag Tank.	**540	..	18,606

* This figure of the catchment area has been verified and found correct. The figure 1,284 square miles seems to be the catchment area of the river up to the previous river gauge station at Umbra which has long since been discontinued.

V—contd.

1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.
M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
CATCHMENT.								
71,178	72,720	38,082	56,499	73,083	100,834	96,489	73,440	79,815
..	..	..	..	..	..	..	..	..
37,734	41,899	38,545	51,207	33,844	64,046	41,072	52,347	31,858
38,934	35,400	32,521	57,458	37,016	67,050	33,928	37,811	37,013
107,750	109,267	84,545	172,750	92,958	217,591	113,252	134,246	119,043
27,097	25,018	21,451	51,954	29,077	74,086	30,173	32,714	26,828
4,952	3,364	2,007	15,397	3,873	×	5,891	5,257	4,223
15,065	13,942	11,727	20,707	14,238	29,077	14,580	14,304	10,327
18,884	15,755	10,823	33,345	15,147	44,421	17,479	19,770	16,058
10,314	33,744	31,668	62,078	41,406	55,954	22,849	44,819	39,223
2,089	1,432	916	3,746	1,125	5,402	1,624	1,697	1,285
15,449	20,424	17,711	24,828	20,061	23,300	8,800	11,944	11,007

× Discharges observed not reliable.

STATEMENT

Abstract Statement of yearly Discharges of

Serial No.	Project Number as per map.	Name of river and site.	1918.	1919.	1920.	1921.	1st January 1922 to 30th April 1922.	1st May 1922 to 30th April 1923.	1923-24.
			M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
							(GUJARAT	CATCHMENT).	
1	18	Sabarmati near Hadol.	8,984	27,265	16,493	20,717	387	21,879	6,645
2	18	Sabarmati near Dudheshwar.	16,133	37,144	19,510	20,140*	718	32,132	8,681
3	17	Hathmati near Himatnagar (Ahmednagar, Idar).	4,996	19,076	6,431	9,356	408	6,037	467
4	20	Khari near Raipur.	1,056	5,119	2,972	2,854	539	990	174
5	..	Meshwa near Harsol.	2,271	9,614	3,595	5,564	170	2,070	50·1
6	..	Watrak River near Ratanpur.	2,897	11,381	16,889	25,010	139	6,040	†6,445
7	..	Mohor River near road-bridge over Nadiad-Kapadvanj Road.	94	3,275	1,199	3,053	..	781	†1,089

Note.—The observations made pertain to the

† Doubtful.

‡ The rainfall recorded is correct

§ The rainfall recorded is correct

¶ The run-off is from actually

V —*contd.*

Rivers in the Deccan and Gujarat—contd.

1924-25.	1925-26.	1926-27	Rain gauge stations within the catchment and rainfall in inches for 1926-27.	Total average rainfall for 1926-27.	Proportion of run-off to rainfall.	Serial No.	Remarks.
M. c. ft.	M. c. ft.	M. c. ft.		Inches.			
10,871	4,720	71,481	Hadol 44·08	‡44·08	¶0·205	1	The river was gauged from 1st May 1926 to 30th April 1927.* The excessive loss in discharge between Hadol and Dudheshwar is probably due to heavy leakage in the boulder formation† of the river channel passing from the sub-montane tract.
13,444	6,330	55,886	Hadol 44·08, Idar 53·97, Himatnagar 35·44, Sadra 32·15, Ahmedabad 51·28.	‡43·38	¶0·129	2	
3,358	1,673	13,092	Idar 53·97, Himatnagar 35·44.	§44·70	¶0·24	3	The river was gauged from 4th July 1926 to 28th February 1927.
441	96	1,323	Himatnagar 35·44, Prantij 32·19, Raipur 47·18.	§38·27	¶0·048	4	The river was gauged from 9th July 1926 to 15th March 1927. *Out of this 534 m.c. ft. were run from the Bokh reservoir and 660 from the Hathmati Canal. ††This is purely from its catchment exclusive of supplies from other sources such as the Bokh reservoir Dhujwa nalla and Hathmati Canal tail.
2,340	508	7,867	Modasa 45·31, Mohanpur 34·33, Harsol (Timba tank) 32·36.	§37·33	¶0·214	5	The river was gauged from 6th July 1926 to 30th November 1926.
11,249	3,652	21,815	Modasa 45·31, Ratanpur 43·30.	§44·30	¶0·35	6	The river was gauged from 4th July 1926 to 31st January 1927.
2,451	1,397	9,007	Kapadvanj 47·13	§47·13	¶0·37	7	The river was gauged from 6th July 1926 to 30th April 1927.

period 1st May to 30th April following.

† for only a portion of the catchment.
‡ for the whole catchment.
§ measured discharges.

STATEMENT

Serial No.	Project Number as per map.	Name of river and site.	1918.	1919.	1920.	1921.	1st January 1922 to 30th April 1922.	1st May 1922 to 30th April 1923.	1923-24.
			M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
8	19	Mahi near Pali..	71,824	592,389	281,382	286,384	1,482	209,488	178,904
9	..	**Panam at Railway bridge near Lunawada.	8,783	58,893	82,235	37,036	111	13,864	4,636
					(CE	NTRAL	INDIA	CATCH	MENT).
10	..	Narbada at Gurdeshwar.	60,391	24,001	28,424	37,449	20,864	62,715	83,940
					DEC	CAN (D	ECCAN	CATCH	MENT).
11	..	Arunawati at Karwand.	243	2,334	2,568	4,156	..	1,548	1,397
					(CE	NTRAL	INDIA	CATCH	MENT).
12	..	Tapti at Dholan Pardi.	18,115	5,250	4,452	3,804	4,013	7,168	6,977
					D	ECCAN	(GHAT	CATCH	MENT).
13	..	Amer at Ganpur.	928	6,301	3,931	4,071	302	6,923	3,493
					(CE	NTRAL	INDIA	CATCH	MENT).
14	..	Tapti at Kathora	20,313	77,137	42,976	123,882	2,293	97,402	81,587

§ The rainfall recorded is correct

† The rainfall recorded is correct

‡ The run-off is from

V—*contd.*

1924-25.	1925-26.	1926-27.	Rain gauge stations within the catchment and rainfall in inches for 1926-27.	Total average rainfall for 1926-27.	Proportion of run-off to rainfall.	Serial No.	Remarks.
M. c. ft.	M. c. ft.	M. c. ft.		Inches.			
358,882	48,345	395,851	Sevalia 41·96 Balasinor 46·93 Lunavada 35·10 Sant Rampur. 37·48 Jhalod 28·83 Dohad 24·90 Devgad Baria. 44·74 Godhra 52·40	§39·04	‡0·37	8	The river was gauged from 4th July 1926 to 30th April 1927.
7,567	2,610	13,963	Lunawada 35·10 Devgad Baria. 44·74	†39·92	‡0·154	9	The river was gauged from 3rd July 1926 to 20th December 1926. **From the year 1922 the discharge of the Panam river is measured at this site and not near Ambli Muvada as in the previous years.
82,178	27,616	32,030	....	..	..	10	The figure represents the hot weather flow only.
1,152	1,189	1,222	Karwand 23·02	†23·02	‡0·09	11	
5,037	2,625	3,011	....	..	..	12	The figure represents the hot weather flow only.
1,867	2,039	3,562	Chopada 26·61	†26·61	‡0·11	13	
110,809	50,791	101,623	....	..	..	14	The rain gauges in the catchment of the Tapti at Kathora are insufficient to give any indication of rainfall over the whole catchment area.

for only a portion of the catchment.

for the whole catchment.

actually measured discharges.

STATEMENT

Serial No.	Project Number as per map.	Name of river and site.	1918.	1919.	1920.	1921.	1st January 1922 to 30th April 1922.	1st May 1922 to 30th April 1923.	1923-24.
			M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
					DEC	CAN (D	ECCAN	CATCH	MENT).
15	..	Kan at Khandbara.	2,069*	3,576	772	3,375*	9	4,628	10,829
16	..	Waghur at Raipur.	3,591	10,037	4,234	16,593	1,975	8,110	5,115
						D	ECCAN	(GHAT	CATCH	MENT).
17	..	Panjra at Pankheda.	1,273	6,466	1,601	5,678	94	8,309	5,523
18	..	Panjra near Nyhalod.	1,589	16,502	1,933	8,135	410	8,094	11,041·39
19	..	Panjra near Dhulia.	1,718	10,501	1,007	6,320	275	5,389	8176·95
					DEC	CAN (D	ECCAN	CATCH	MENT).
20	..	Bori at Purmapada.	..	1,242	253	2,179	..	1,378	1,407
						D	ECCAN	(GHAT	CATCH	MENT).
21	..	Mosam at Sangameshwar.	2,034	26,169	2,059	4,756	..	5,540	12,242
22	..	Girna at Thengoda.	4,932	19,166	3,176	8,571	..	12,827	11,808
23	23	Girna at Jamda.	6,942	57,856	9,661	29,416	651	24,796	25,330·8
24	23	Girna at Rahipuri.	6,235	58,899	9,796	42,885*	..	24,076	25,672·8

* Doubtful.

‡ The rainfall is correct
§ The run-off is from actually

V—*contd.*

1924-25.	1925-26.	1926-27.	Rain gauge stations within the catchment and rainfall in inches for 1926-27.	Total average rainfall for 1926-27.	Proportion of run-off to rainfall.	Serial No.	Remarks.
M. c. ft.	M. c. ft.	M. c. ft.		Inches.			
8,171	1,920	1,214	Amli 27·25 Choupala 31·44	‡29·34	§0·52	15	
7,802	3,844	17,275	Raipur 33·03 Jamner 28·32	‡30·67	§0·35	16	
5,986	1,237	3,181	Pimpalner 13·89	‡13·89	§1·90	17	
11,620·22	7,095·93	6,567	Nyhalod 30·77 Ambli 27·25 Chawpala 31·44 Dhulia 16·90	26·59	0·13	18	Discharge at Nimkhedi weir observed from 1st May 1926 to 30th April 1927.
7,311·80	4,978·82	4,606	Dhulia 16·90 Ambli 27·25 Chowpala 31·44	25·20	0·11	19	Discharge at Mahindale weir observed from 1st May 1926 to 30th April 1927.
5,603	1,725	2,130	Purmapada 13·10	‡13·10	§0·00	20	Figures for the years 1897 to 1906 are also available.
11,315	3,275	4,376	Nampur 8·07 Taharabad 14·08 Visapur 15·51	‡12·55	§0·45	21	
18,364	9,047	9,995	Chankapur 27·20 Hatgad 61·50 Kalwan 19·11 Thengoda 8·70	‡29·18	§0·36	22	
37,876·68	19,031·53	16,448·07 (excluding the discharge of Canals 306·76 m. c. ft.)	Nampur 8·07 Lakhamapur. ..10·44 Malegaon (I. B.) 17·14		0·17	23	
42,819·88	17,948·26	12,925·41*	Nandurtek 5·97 Satana 10·13 Taharabad 14·03 Umbrane 4·19 Chankapur 27·20 Hatgad 60·91 Kalvan 17·91 Thengoda 8·48 Jamda 19·38	16·99	0·14	24	The discharge was observed from 1st May to 31st Oct. 1926. The rainfall noted is the average of 12 gauges in the Girna Valley for the period concerned.

for the whole catchment.
measured discharges.

STATEMENT

Serial No.	Project Number as per map.	Name of river and site.	1918.	1919.	1920.	1921.	1st January 1922 to 30th April 1922.	1st May 1922 to 30th April 1923.	1923-24.
			M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
					DEC	CAN (D	ECCAN	CATCH	MENT).
25	..	Manad at dam site (Saygaon).	366	4,782	393	7,177	88	7,910	3,384
					D	ECCAN	(GHAT	CATCH	MENT).
26	2	Unanda at Wasarkhed.	875	9,809*	517	1,674	..	2,169	4,400
27	2	Kalwa at Karanjwan.	2,992	9,730	2,496	5,369	..	6,861	8,175
					DEC	CAN (D	ECCAN	CATCH	MENT).
28	..	Odal at Khadakozath.	290	2,326	191	980*	..	97	590
					D	ECCAN	(GHAT	CATCH	MENT).
29	2	Kadwa at Palkhed.	10,513	38,278	7,335	24,125	..	19,053	16,517
30	1 & 2	Godavari at Gangapur.	6,182	17,160	7,678	11,577	19	14,644	13,693

* Doubtful.

‡ The rainfall is correct for

§ The run-of is from

†† During the year under review fresh cross and longitudinal sections were of areas and wetted perimeters were prepared and

V—*contd.*

1924-25.	1925-26.	1926-27.	Rain gauge stations within the catchment and rainfall in inches for 1926-27.	Total average rainfall for 1926-27.	Proportion of run-off to rainfall.	Serial No.	Remarks.
M. c. ft.	M. c. ft.	M. c. ft.		Inches.			
2,073	2,784	1,307	Nandgaon 17·35 Nayadongri 15·50	16·42‡	0·10§	25	
4,094	2,832	††2,427	Wazarkhed 25·36 Achala Fort 41·52 Karanjkhed. 47·07 Wani 33·85	36·95‡	0·42§	26	
7,136	4,153	7,405	Charosa 56·71 Koshimba 50·62 Bhanwad 67·36 Nalwadi 32·99	51·92‡	0·64§	27	
921	191	601	No rain guage station.	..	..	28	
17,054	8,563	17,479	Inspection Bungalow, Waghad.. 53·20 Subordinate's quarters, Waghad.. 40·34 Chachadgaon .. 41·98 Charosa 56·71 Achala Fort 41·52 Koshimba 50·72 Wazarkhed 25·36 Palkhed 20·28 Dindori 24·01 Bhanwad 67·36 Jalkheda 77·47 Karanjkhed 47·07 Nalwadi 32·99 Pophalwadi 73·00 Sadral 70·03 Wani 33·85 Rasegaon 33·42	41·08‡	0·58§	29	Figures from 1895 to 1906 are also available. Average rainfall worked out by taking average rainfall of the smaller catchments lying within this catchment.
14,717	6,501	11,222	Waghere 101·20 Girnare 33·16 Trimbak 99·12	77·83‡	0·43§	30	

the whole catchment.
actually measured discharges.
taken and as there were changes in them from those last taken new tables.
utilised in calculating the discharges in question.

STATEMENT

Serial No.	Project number as per map.	Name of river and site.	1918.	1919.	1920.	1921.	1st January 1922 to 30th April 1922.	1st May 1922 to 30th April 1923.	1923-24.
			M.c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
						DECCAN	(GHAT	CATCHMENT).	
31	2	Godavari at Nandur-Madhmeshwar.	27,632	106,046	49,021	60,012	..	68,266	72,013
32	2 & 3	Darna at Nandgaon.	..	..	..	..	..	..	..
33	2 & 3	Aundha Nala at Mukhne.	1,622	4,008‖	3,985	3,743	..	×	7,860
34	2 & 3	Karwa at Pimpalgaon.	771	4,149‖	2,107	2,708	..	3,615	3,222
35	4	Pravara at Ojhar Weir.	13,655	40,506	30,594	19,360	..	1,198‖	31,359

× Discharges observed

¶ Rainfall not available.

‡ The rainfall is correct
§ The run off is from actually
‖ Doubtful.

V—*contd.*

1924-25.	1925-26	1926-27	Rain gauge stations within the catchment and rainfall in inches for 1926-27.	Total average rainfall for 1926-27.	Proportion of run-off to rainfall.	Serial No.	Remarks.
M. c. ft.	M c. ft.	M. c. ft.		Inches.			
80,943	43,867	81,995	Nasik 25·48 Deolali 21·30 Kherwadi 10·43 Girnare 33·16 Waghere 101·20 Palkhed 20·28 Wazarkhed 25·36 Achala Fort 41·52 Waghad Inspection Bungalow 53·20 Subordinate's quarters, Waghad 40·34 Ozar Tambat 17·11 Ambewadi 147·08 Koshimba 50·72 Indore 62·40 Kusegaon 104·42 Chachadgaon 41·98 Pimpalgaon 20·02 Niphad 15·45 Dindori 24·01 Taked 45·73 Igatpuri 134·06 Nalwadi 32·99 Bhanwad 67·36 Wani 33·85 Rasegaon 33·42 Jalkheda 77·47 Sadral 70·03 Pophalwadi 73·00 Ghoti Railway Station. 75·19 Dhamangaon 38·02 Walvihir 111·75 Jamundi 173·90 Waghere 40·17 Trimbak 99·12 Karanjkhed 47·07 Darna Dam 40·48 Charosa 56·71 Nandurma dh-meshwar 17·13	38·98‡	0·55§	31	Average rainfall worked out by taking average rainfall of the smaller catchments lying within this catchment.
..	..	..	....	..	..	32	
11,114	2,724	4,149	Kusegaon 104·42	104·42‡	0·33§	33	
3,950	2,297	4,479	Taked 45·73 Indore 62·40 Dhamangaon .. 38·02	48·72‡	0·59§	34	
29,934	25,592	27,283	Akola 17·49 Sangamnore 15·45 Ghatghar on hill. 133·40 Ghatghar village. 133·00 Ghatghar Bungalow 204·83 Bhandardara .. 127·47 Udavna 171·10 Samrad¶ .. Panjre 110·90 Shiptawadi .. 189·90	45·71‡	0·41§	35	Figures are also available from 1882 to 1906. Total average rainfall has been worked out from area of influence.

not reliable.

for the whole catchment.
measured discharges.

STATEMENT

Serial No.	Project number as per map.	Name of river and site.	1918.	1919.	1920.	1921.	1st January 1922 to 30th April 1922.	1st May 1922 to 30th April 1923.	1923-24
			M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
						DECCAN	(GHAT	CATCHMENT).	
36	5	Mula at Chikalthan.	9,447	35,053	17,307	24,091	..	28,398	27,855
37	5	Mula at Rahuri .	13,748	48,288	21,511	40,304	449	64,106	33,777
38	6	Kukari at Edgaon.	11,763	31,215	13,675	20,066	..	23,483	22,620
39	7	Mina at Wadgaon.	1,999	7,108	3,450	7,111	..	5,158	10,053
40	8	Ghod at Nirgudsar.	7,221	27,582	16,804	22,792†	..	19,989	20,553
41	..	Ghod at Kathapur.	..	..	..	..	17	124	664
42	6	Kukari at Shirapur.	9,114†	42,425	33,603	24,199	3	32,539	33,471
43	9	Bhima at Chaskaman.	5,033	18,182	9,275	12,871	..	12,067	12,598
44	10	Lake Fife at Khadakvasla.	..	..	..	Transferred to		Statement VI.	
45	11	Yelwandi at Bhatghar (Lake Whiting).	..	..	..	..	..	..	..
					DECCAN (D		ECCAN	CATCHMENT).	
46	..	Seena at Hatwalan.	131	5,859	755	1,038	..	2,843	2,382
					DECCAN		(GHAT	CATCHMENT).	
47	11	Gunjawni at Mohori.	7,425	23,917	23,905	20,410	52	28,916	20,970

† Doubtful.
‡ The rainfall is correct for
§ The run-off is from actually

V—*contd.*

1924-25.	1925-26.	1926-27.	Rain gauge stations within the catchment and rainfall in inches for 1926-27.	Total average rainfall for 1926-27.	Proportion of run-off to rainfall.	Serial No.	Remarks.
M. c. ft.	M. c. ft.	M. c. ft.		Inches.			
31,117	21,218	25,269	Pachnai 222·03 Kotul 18·76 Chas 11·77 Harischandragad. 277·74 Brahmanpada. 21·78	110·42‡	0·17§	36	
33,883	28,405	29,007	Rahuri 10·05 Pachnai 222·03 Kotul 18·76 Chas 11·77 Harischandragad 277·74 Brahmanpada. 21·78	93·68‡	0·15§	37	
30,522	18,300	20,714	Junnar 22·40 Otur 17·88 Pur 93·68 Malsej 81·39	53·84‡	0·63§	38	
7,506	3,493	4,473	Shivali 69·36 Dhamankhed. 17·07	43·21‡	0·57§	39	
34,391	16,425	22,512	Aupe 213·91 Asane 85·18 Manchar 14·74 Ghoda 25·38	84·80‡	0·40§	40	
341	66	14	....	..	..	41	The figure represents the hot weather flow only.
40,042	23,961	21,592	Junnar 22·40 Otur 17·88 Pur 93·68 Malsej 81·39	53·84‡	0·37§	42	Gauging started in December 1902.
15,030	12,110	12,332	Bhimashanker. 211·70 Chaskaman 20·25 Wada 35·36	89·44‡	0·42§	43	
..	..	..	....	..	..	44	
..	..	..	....	..	..	45	
1,975	1,556	772	Ripon Hospital. 16·61 Kapurwadi 19·84	18·22‡	0·04§	46	
20,391	18,280	27,520	Khed Shivapur. 53·44 Margasne 41·46 Rajgad 130·07 Torna 83·30 Nasarapur 60·50 Kanthadi 50·00 Vale 92·61	73·05‡	0·80§	47	

the whole catchment.
measured discharges.

STATEMENT

Serial No.	Project Number as per map.	Name of river and site.	1918.	1919.	1920.	1921.	1st January 1922 to 30th April 1922.	1st May 1922 to 30th April 1923.	1923-24.
			M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
					DECCAN		(GHAT	CATCHMENT).	
48	..	Nira at Apti (formerly called Nira at Natambi).	..	..	20,427	20,417	13	22,017	..
49	11	Nira at Karanja.	8,542	31,880†	21,876	21,344	14†	21,933†	22,369
50	11	Nira at Vir ..	27,810	96,745	84,898	7,384	..	90,755	80,926
51	12	Krishna at Dhom	6,794	15,995	14,847	15,376	84	16,905	17,297
					DECCAN (D	ECCAN	CATCHMENT).		
52	12	Yerla at Yeralwadi.	1,205	2,898	2,049	3,949	118	11,456	4,244
					D	ECCAN	(GHAT	CATCHMENT).	
53	12	Koyna at Helwak	59,212	147,016	132,095	134,397	124	171,403	179,268

† Doubtful.

‡ The rainfall is correct for

§ The run-off is from actually

V.—*contd.*

1924-25.	1925-26.	1926-27.	Rain gauge stations within the catchment and rainfall in inches for 1926-27.	Total average rainfall for 1926-27.	Proportion of run-off to rainfall.	Serial No.	Remarks.
M. c. ft.	M. c. ft.	M. c. ft.		Inches.			
..	..	..	....	..	..	48	Observations stopped since 1923.
18,174	15,170	23,920	Nigurghar 90·69 Shirgaon 147·01 Apti 76·15 Hirdushi 106·31 Rajuri 152·30 Karangaon 247·75 Purakhurd 110·50 Kari 85·50 Natambi 79·25	‡121·72	0·98§	49	Shirgaon rainfall is doubtful.
70,756	62,421	101,817	Bhordi 217·76 Torna 83·30 Rajgad 130·07 Bhatghar Bungalow. 28·73 Bhatghar village. 32·60 Shirgaon 147·01 Nigurghar 90·69 Margasne 41·46 Khed Shivapur. 53·44 Purandhar 17·75 Vir 14·91 Apti 76·15 Hirdushi 106·31 Waroti 233·00 Bhutanda 197·50 Chandavni 206·00 Kamra Khurd 125·50 Mhashivli 78·50 Kondgoan 206·00 Sandaswadi 105·00 Rajuri 152·30 Karangaon 247·75 Pura Khurd 110·50 Kari 85·50 Natambi 79·25 Nasrapur 60·50 Kamthadi 50·00 Bhor 34·80 Khandala 20·81 Vela 92·61	‡72·39	0·86§	50	Figures for 1888 to 1906 with the exception of those for 1900 are also available. Shirgaon rainfall is doubtful. Average rainfall is worked out by taking average rainfall of the smaller catchments lying within this catchment.
14,574	10,999	16,022	Dhom 43·57 Panchgani 61·22 Mahableshwar 295·14	‡183·31	0·62§	51	
6,082	1,540	942	Khatgun 18·81 Nehr 23·92 Vaduj 17·29	‡20·01	0·07§	52	Gauging started in July 1905. The site is below Nehr tank at Khadgaon weir.
131,515	123,036	182,343	Helvak 251·72 Malcolmpeth. 295·14 Bamnoli 130·29 Sonat 77·30 Mahableshwar. 295·14	‡229·92	0·95§	53	Gauging started in July 1902.

the whole catchment.
measured discharges.

STATEMENT

Serial No.	Project Number as per map.	Name of river and site.	1918.	1919.	1920.	1921.	1st January 1922 to 30th April 1922.	1st May 1922 to 30th April 1923.	1923-24.
			M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
						DECCAN	(GHAT	CATCH	MENT)
54	..	Krishna at Khodsi weir.	23,138	74,698	..	57,314	345	91,701	57,545
55	12	Krishna at Kusnal.	186,020	509,502	452,823	286,017	1,278	503,873	726,146
56	13	Harankashi at Ajra	20,023	32,842	31,114	34,334	148	39,960	48,300
57	13 & 14	Ghataprabha at Hadlag.	20,919	30,836	29,195	34,459	255	41,618	52,907
58	13 & 14	Ghataprabha at Gokak or Dhupdal Weir.	60,896	99,345	92,537	111,002	389	113,589	167,745

* During the year under review fre h cross and longitudinal sections were of areas and wetted perimeters were prepared and

‡ The run-off is calculated from

§ The rainfall is correct for

V—*contd.*

1924-25.	1925-26.	1926-27.	Rain gauge stations within the catchment and rainfall in inches for 1926-27.	Total average rainfall for 1926-27.	Proportion of run-off to rainfall.	Serial No.	Remarks
M. c. ft.	M. c. ft.	M. c. ft.		Inches.			
54,252	48,212	76,939	Mahableshwar. 294·10 Panchgani 60·54 Wai 25·76 Kas 200·13 Medha 78·54 Satara 38·58 Rewadi 24·97 Koregaon 27·40 Dhome 43·50 Bamnoli 130·29	92·38	0·29	54	The discharge was observed from 1st May 1926 to 30th April 1927.
879,705	420,320	635,595	Dhome 43·57, Helwak 251·72, Malcolmpeth 295·14, Bamnoli 130·29, Sonat 177·30, Mahableshwar 295·14, Khatgun 20·26, Nehr 23·92, Vaduj 17·93, Satara 38·58, Koregaon 27·45, Wani 24·87, Panchgani 61·22, Medha 72·95, Patan 89·63, Karad 32·62, Islampur 23·07, Shirala 25·86, Pusevali 24·34, Vita 19·06, Tasgaon 12·29, Kas 190·93, Chikhali 16·32, Retra Bdk. 30·59, Mayani 20·02, Sangli 18·24, Miraj 14·02, Shirol 18·50, Kolhapur 45·73, Nipani 26·81, Chikodi 18·95, Kurundwad 15·60, Gargeti 29·09.	65·00§	0·58‡	55	
36,172	31,133	39,296	Rewari 24·97 Ajra 83·58 Gawasa 132·60 Amboli 289·05	168·41§	1·07‡	56	By the isohyet method the proportion of run-off to rainfall comes to 0·67.
41,160	31683	84,557*	Adkur 79·70 Pundra 158·89	119·29§	0·93‡	57	Figures are also available from 1887 to 1891 and also for 1903 and 1905.
126,806	124,404	141,612	Amboli 290·00 Pundra 159·44 Chandgad 126·34 Ajra 84·88 Tambulwadi. 82·37 Gad Hinglaj 42·74 Benalli 19·54 Sankeshwar 25·98 Hukeri 21·91 Hattargi 12·75	86·59§	0·65‡	58	†† Length of catchment area is 70 miles. Figures for 1891 to 1906 are also available.

taken and as there were changes in them from those last taken new tables utilised in calculating the discharges in question.
actually measured discharges.
the whole catchment.

STATEMENT

Serial No.	Project Number as per map	Name of river and site.	1918.	1919.	1920.	1921.	1st January 1922 to 30th April 1922.	1st May 1922 to 30th April 1923.	1923-24.
			M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
59	13 & 14	Tamraparni at Rajgoli.	12,806	29,358	23,154	20,213	208	30,320	42,130
60	14	Markandya at Shirur.	998	3,096	4,477	5,985	110	5,028	6,957
61	15	Malaprabha at Bhutewadi.	3,807	10,397	11,726	12,036	66	12,725	22,613
62	15	Malaprabha at Khanapur.	5,975	15,545	16,083	18,883	145	19,031	34,610
63	16	Wardha at Banwasi (Bhasi)	21,653	38,062	33,102	35,647	121	28,053	67,821
64	22	Dharma near Shringeriwad.	376	1,288	871	1,277	..	1,527	4,477
65	21	Kumudvati River, Bellur village and Madag Tank.	6,025	9,373	9,981	8,654	146	6,454	20,972

* During the year under review fresh cross and longitudinal sections were of areas and wetted perimeters were prepared and

† The rainfall recorded is

‡ The run-off is calculated from

§ The rainfall is correct for

V—*concld.*

1924-25.	1925-26.	1926-27.	Rain-gauge stations within the catchment and rainfall in inches for 1926-27.	Total average rainfall for 1926-27.	Proportion of run-off to rainfall.	Serial No.	Remarks.
M. c. ft.	M. c. ft.	M. c. ft.		Inches.			
33,940	31,106	36,481.*	Wagotra 228·00 Patne 151·10 Chandgad 125·01 Rajgoli 39·55 Tambni-wadi 81·12	125·14§	0·61‡	59	Gauging started in August 1902.
5,894	5,109	6,636	Benali 19·44 Turmuri 57·08 Belgaum 46·55	41·22§	0·42‡	60	
16,083	16,701	18,888	Kumkumbi 226·88 Jamboti 143·25	185·06§	0·35‡	61	
22,107	21,452	23,871	Kumkumbi 226·88 Jamboti 143·25 Khanapur 77·73	149·20§	0·38‡	62	
44,610	58,808	44,074	Sirsi 102·84 Siddapur 111·34	107·09§	0·40‡	63	Gauging started in 1908.
2,191	3,758	2,526	Vekambi 100·60	100·60†	0·18‡	64	§§Figures for the years 1882 to 1886 are also available. The catchment area is 10 miles in length.
17,413	20,551	12,717	Kalmani 30·95	30·95†	0·25‡	65	Figures are also available from 1869 to 1894. **Length of catchment area of Madag tank is 46 miles.

taken and as there were changes in them from those last taken, new tables
utilised in calculating the discharges in question.
applicable to only a portion of the catchment.
actually measured discharges.
the whole catchment.

STATEMENT

Observed Annual Discharges

The results are obtained from the observations on the quantities of
the years noted. The proportion the discharge obtained bears
the number of rain gauge stations are far too few to
The object of the return is to show the supply of
area in situations similar to

Serial No.	Name of Tank.	Contents of the Tank.	Catchment area.	Length of Catchment area.
		M. c. ft.	Sq. miles.	Miles.
				GUJARAT.
1	Muvalia Tank	237	30	10
2	Wangroli Tank	212	13	6
3	Salat Tank	135	12·5	8
4	Savli Tank	172	11	4
5	Futelao Tank	56	7	4
6	Nagrama Tank	97	1·5	1½
7	Tranja Tank	80	0·3	0·85
				DECCAN.
8	Mhaswad Tank	2,601	480	35
9	Lake Fife at Khadakvasla	3,955	196	24
10	Ekruk Tank	2,616†	159	15½
11	Lake Beale (Darna Dam)	7,763	156	25
12	Wilson Dam (Bhandardara).. ..	10,531	47	9½
13	Lake Whiting on Yelwandi at Bhatghar.	5,813	128	24
14	Chankapur Tank	1,548	100	10½
15	Ashti Tank	1,419	92	14½
16	Nehr Tank	(a)407	59·5	10

Note.—The observations made pertain to
N.B.—During the years marked
× Discharge observed
§ The tank was under construction and

(a) Original contents of 490 M. Cf. are now reduced by silt deposit as ascertained by the recent silt

VI.

from Catchme . Areas.

water stored in the tanks and discharged over their waste weirs during
to the recorded rainfall is not given in this statement, because
admit of this calculation being made accurately.
water that may be expected from a given catchment
those under observation.

Run-off or discharge observed.

1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.
M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
212	337*	749*	1,189*	*Nil.*	243*	1,352*	135
170	350*	75	141	*Nil.*	323*	343*	119
..	..	..	125	*Nil.*	150	372*	188*
..	..	45	85	*Nil.*	161*	219*	72
..	..	..	..	..	..	..	..
..	..	..	..	..	97	28	*Nil.*
..	..	..	..	..	74	48	*Nil.*
2,631	4,185*	5,324*	13,039*	3,936*	1,278	2,145	2,288
72,086*	67,355*	62,324*	53,056*	35,976*	52,264*	54,800*	78,821*
1,564	1,597	3,811*	×	769	606	1,238	2,208
..	..	..	24,054*	16,358*	28,019*	41,044*	30,559*
..	..	..	..	..	..	..	..
43,789*	40,086*	35,997*	38,185*	21,073*	34,656*	35,220*	45,412*
..	..	..	..	2,288*	9,845*	9,455*	8,034*
268	943	868	4,545*	635	65	361	790
1,489	802	840	1,724	1,863	1,305	1,137	1,085

the period 1st May to 30th April following.
(*) the tank overflowed.
not reliable.
no observations could be taken.
survey.

STATEMENT

Serial No.	Name of Tank.	Contents of the Tank.	Catchment area.	Length of Catchment area.
		M. c. ft.	Sq. miles.	Miles.
				DECCAN.
17	Maini Tank	(*b*)75	52	8½
18	Bhatodi Tank	59†	44	30
19	Dambal Tank	114	43	7½
20	Mukti Tank	(*a*) 324	34·20	10
21	Waghad Tank	606	29	6½
22	Pathri Tank	407	27·5	9½
23	Muchkundi Tank	705	26	7
24	Shirsuphal Tank	365	23·50	6½
25	Bhadalwadi Tank	222	23	7½
26	Asundi Tank	74	23	3½
27	Parsul Tank	119	17·75	9½
28	Wadshivne Tank	203	14·5	5
29	Mhaswa Tank	153†	13·40	5
30	Medleri Tank	58	11	4½
31	Talwada Tank	116	10·50	6
32	Shedbal Tank	(*b*) 29	7·81	3½
33	Koregaon Tank	83†	7	4½
34	Hartala Tank	135	6·80	2½
35	Khirdi Sathe Tank	91	6·45	2½
36	Mavinkop Tank	43	6·25	3½
37	Gadikeri Tank	34	4·68	2½
38	Killedkeri Tank	22	1·56	1½

Note.—The observations made pertain to

N.B.—During the years marked

× Discharge observed

† This figure is given

VI—*contd.*

Run-off or discharge observed—*contd.*

1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.
M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
1,839	3,429	2,158	3,214	319	122	676	3,041
1,190*	288*	3,139*	2,320*	42	13	224*	1,452*
173	56	112	239	3	232	95	13
146	59	181	1,051*	3	73	123	348*
3,199*	2,817*	2,850*	1,942*	1,894*	2,868*	2,812*	5,827*
..	515*	488*	950*	383*	34	240	836*
..	..	101	60	47	..	..	36
113	75	161	198	24	32	47	179
55	207	125	191	132	84	91	126
115	31	40	Not observed.	7	164	183	210
116	41	137	405*	48	64	340*	829*
..	97	357*	55	24	24	95	52
703*	138	696*	309*	*Nil.*	104	×	348*
85*	56	24	501	10	61	42	14
3	*Nil.*	*Nil.*	56	9	70	76	151
..	..	..	..	×	×	×	×
73	61	74	238*	94	19	33	181*
71	40	48	94	*Nil.*	17	79	287*
27	13	19	127*	39	26	47	70
..	..	..	..	..	..	..	..
..	..	..	..	1	322	25	771
..	..	..	..	14	115	23	109

the period 1st May to 30th April following.
(*) the tank overflowed.
not reliable.
In round number.

STATEMENT

Observed Annual Discharges

The rssults are obtained from the observations on the quantities of
the years noted. The proportion the discharge obtained bears
the number of rain gauge stations are far too few to
The object of the return is to show the supply of
area in situations similar to

Serial No.	Name of Tank.	Run-off or						
		1915.	1916.	1917.	1918.	1919.	1920.	1921.
		M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
							GU	JARAT.
1	Muvalla Tank ..	105	750*	3,535*	40	3,018*	61	3,643*
2	Wangroli Tank .	2	89	481*	3	134	80	500*
3	Saiat Tank ..	*Nil.*	*Nil.*	429*	1	139*	25	500*
4	Savli Tank ..	37	50	137	1	131	67	203
5	Futelao Tank ..	....	....	112	1	145*	3	229*
6	Nagrama Tank .	*Nil.*	*Nil.*	23	*Nil.*	*Nil.*	*Nil.*	2
7	Tranja Tank ..	*Nil.*	*Nil.*	64	*Nil.*	*Nil.*	*Nil.*	24
							D	ECCAN.
8	Mhaswad Tank .	4,039*	×*	2,010*	388	5,334*	1,091	2,688
9	Lake Fife at Khadakwasla.	38,622*	35,483*	48,845*	17,357*	48,887*	46,695*	36,821*
10	Ekruk Tank ..	3,658*	6,117*	3,893*	253	2,346	154	1,302
11	Lake Beale (Darna Dam).	19,158*	21,893*	34,113*	9,663*	27,572*	21,381*	25,750*
12	Wilson Dam (Bhandardara.)	....	....	....	....	....	....	....
13	Lake Whiting on Yelwandi at Bhatghar.	26,781*	23,812*	42,512*	19,925*	42,673*	37,728*	35,736*
14	Chankapur Tank.	3,797*	5,110*	7,392*	1,346*	9,732*	1,448*	4,360*
15	Ashti Tank ..	1,684*	1,614*	1,649*	284	1,818*	183	350

Note.—The observations made
N.B.—During the years
× Discharge

VI—*contd.*

from Catchment Areas—contd.

water stored in the tanks and discharged over their waste weirs during
to the recorded rainfall is not given in this statement, because
admit of this calculation being made accurately.
water that may be expected from a given catchment
those under observation—*contd.*

Discharge observed—*contd.*					Serial No.	Remarks.
o1922.	1923-24.	1924-25.	1925-26	1926-27.		
M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.		
804*	142	253*	56·48	270·58*	1	Catchment area is hilly, valleys or low lands being cultivated.
24	*Nil.*	61	88·84	734·81*	2	The catchment area consists of brownish black soil and has a steep fall favourable to a good run-off.
111	*Nil.*	25	90·29	600·40*	3	
51	7	108	33·53	424·08*	4	
16	5	5	0·02	3·79	5	The tank was completed in November 1916 and observations for the flow into the tank were taken in 1917 for the first time. The tank was practically empty.
....	*Nil.*	....	....	....	6	These works were completed in 1909. In 1910 and 1911 the tanks were empty. These tanks are fed by means of supply channels from the Matar Drainage Channel, which has a catchment area of 13 square miles and the length of the catchment basin is 10 miles. No run-off in Nagrama Tank. Tranja Tank was replenished to 5/8 full capacity mainly from its feeder channel.
....	*Nil.*	....	2·06	50·60	7	
437	2,401	1,092	768·26	2,323*	8	Figures are also available for 1899 to 1906.
48,048*	45,436*	42,296*	36,070*	55,313*	9	
267	1,666·52	1,394·68	1,240·68	978·88	10	† Original contents of 3,310 m. c. ft. is now reduced by silt deposit as ascertained by recent silt survey. Figures are also available for 1899 to 1906.
29,189*	25,032*	21,259*	21,277*	31,073*	11	Ghat catchment.
....	....	19,380*	26,995*	25,996*	12	This appears for the first time in 1924.
42,130*	40,768*	24,918*	27,312*	40,410*	13	Figures are also available from 1888 to 1906.
6,006*	3,246*	3,430*	3,103*	2,446*	14	Ghat catchment.
23	283·26	1,121·53	977·66	535·49	15	Figures are also available for 1899 to 1906.

pertain to the period 1st May to 30th April following.
marked (*) the tank overflowed.
observed not reliable.

STATEMENT

Serial No.	Name of Tank.	Run-off or discharge						
		1915.	1916.	1917.	1918.	1919.	1920.	1921.
		M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
								D ECC A N
16	Nehr Tank ..	1,243	1,719*	468	415	386	..	421
17	Maini Tank ..	1,331	6,956*	2,029*	650*	500	..	710
								o
18	Bhatodi Tank ..	1,524*	2,243*	1,844*	..	2,712*	..	..
19	Dambal Tank ..	223*	426*	497*	226*	110	33	195
20	Mukti Tank ..	184	208*	151*	1	680*	16	254
21	Waghad Tank ..	1,991*	2,741*	3,156*	1,675*	4,900*	1 736*	2,166*
22	Pathri Tank ..	979*	1,396*	866*	50	363	132	258
23	Muchkundi Tank.	172	×*	102	112	283	382	332
24	Shirsuphal Tank.	213	238	307*	*Nil.*	246	188	55
25	Bhadalwadi Tank.	156	355*	232*	33	305*	63	139
26	Asundi Tank ..	228*	493*	1,178*‡	179	188*	51	124*
27	Pareul Tank ..	341*	676*	176*	*Nil.*	483*	*Nil.*	472*

Note.—The observations made
N.B.—During the years
× Discharge
‡ The discharge

VI—*contd.*

observed—*contd.*					Serial No.	Remarks.
1922.	1923-24.	1924-25.	1925-26.	1926-27.		
M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.			
223	259·58	385·88	199·74	678·42*	16	Figures are also available for 1899 to 1906.
384	94·91	117·61	107·78	782·55*	17	The heavy discharge in 1916 was due to the abnormally heavy rainfall of 52·99 inches during that year which was the highest on record since 1899 and 20·88 inches more than the previous maximum rainfall in 1912. Figures are also available for 1899 to 1906. (*b*) Original contents of 115 M. c. ft. are now reduced by silt deposit as ascertained by the recent silt survey.
..	..	..	212·85	127·59*	18	Figures are also available for 1899 to 1906.
37	27	184	170	6	19	The tank did not fill. The rainfall was 15·85 inches. Figures are also available for 1899 to 1906.
157	342·69	727·69*	95·11	124·96	20	(*a*) Capacity reduced from 342 m. c. ft. owing to silt in tank. Figures are also available for 1899 to 1906.
2,148*	2,638*	2,191*	1,331*	3,526*	21	Ghat catchment. Figures are also available for 1900 to 1906.
62	585·30*	906·97*	214·91	510·68*	22	
102	28	65·19	71·75	55·93	23	In 1916 the tank overflowed for the first time since its construction. The maximum height of flood was 6 feet over the crest of weir. The tank did not fill in the year under report. Rainfall 10·05 inches. Figures are also available for 1899 to 1906.
130	1	76	88	88	24	Figures are also available for 1899 to 1906.
23*	—12	44	65	124	25	
696*	108	128*	105	82	26	Deccan catchment. The waste weir did not overflow. Rainfall 23·36 inches. Figures are also available for 1899 to 1906.
..	334*	212*	89*	63	27	Figures are also available for 1899 to 1906.

pertain to the period 1st May to 30th April following.
marked (*) the tank overflowed.
observed not reliable.
figure is doubtful.

STATEMENT

Serial No.	Name of Tank.	Run-off or discharge						
		1915.	1916.	1917.	1918.	1919.	1920.	1921.
		M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.
								D ECC A N
28	Wadshivne Tank	81	213*	234*	36	180	116	70
29	Mhaswa Tank	148	184	596*	63	202*	56	187
								o
30	Medleri Tank	43	84	540*‡	56	233*	68	43
31	Talwada Tank..	33	67	91	5	11	24	22
32	Shedbal Tank	×	×*	×*	15	..	28	24
33	Koregaon Tank .	225*	298*	164*	15	30	..	34
34	Hartala Tank	621*	376*	100	*Nil.*	42	2	28
35	Khirdi Sathe Tank.	79	77	75	*Nil.*	102	*Nil.*	49
36	Mavinkop Tank	..	..	..	..	..	..	..
37	Gadikeri Tank..	53	165*	108*	91*	52	..	..
38	Killedkeri Tank	33	72*	42*	14	37	..	..

Note.—The observations made

N.B.—During the years

× Discharge observed

‡ The discharge

VI—*concld.*

observed—*concld.*					Serial No.	Remarks.
1922.	1923-24.	1924-25.	1925-26.	1926-27.		
M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.	M. c. ft.		
30	89·04	65·78	66·27	92·67	28	
106	85·10	173·61	67·57	190·61	29	The F. S. L. of the tank was increased from R. L. 151·00 to R. L. 152·00 in March 1915 previous to which the contents of the tank were 158 m. c. ft. Figures are also available for 1899 to 1906.
76	40	124*	92	30	30	Waste weir did not overflow. Rainfall 19·90 inches. Figures are also available for 1899 to 1906.
..	18·89	53·11	7·97	0·0	31	The work appears for the first time in 1902. There was no replenishment in the tank.
22	..	11·92	1·67 inches maximum run off per hour.	1·72	32	(*b*) Corrected in 1920. The discharge observed is for the months from July to November 1926. There was no water above the sill level of the tank during the remaining period. The replenishment was received on the 8th July 1926. Rainfall 12·05 inches.
5	152·11*	90·46	27·78	178·06*	33	Figures are also available for 1899 to 1906.
27	32·47	..	..	..	34	Figures are also available for 1900 to 1902 and for 1904 and 1906. There was no replenishment in the tank.
..	25	33	31	4·71	35	
29	97*	259*	33	27	36	The work appears for the first time in 1922. Waste weir did not overflow. Rainfall 48·36 inches. The rain gauge is not situated in the C. A.
12	51	69*	33	59	37	Waste weir did not overflow. Rainfall 30 inches.
..	..	..	..	..	38	Observations discontinued from 1922.

pertain to the period 1st May to 30th April following.
marked (*) the tank overflowed.
not reliable.
figure is doubtful.

STATEMENT

Statement of Extraordinary Flood

No.	Name of Stream.	Catchment area.	Length of Catchment area.	Discharge in cusecs.
		Sq. miles.	Miles.	
1	Hathmati River at Himatnagar (Ahmednagar, Idar State).	524	40	158,112
2	Lilka River in mile 11 of the Dhandhuka-Gogha Road.	50	14	20,000
3	Khara Ghore Tank in the Ahmedabad District.	43	17	18,741
4	Khandia River in mile 6 of the Godhra-Shera Road, Godhra Taluka.	35	8	15,963
5	Nala in mile 7 of the Ahmedabad-Dholka Road.	25	6	7,500
6	Chandrabhaga Nala on the Ahmedabad-Sabarmati Road.	23	8	9,290
7	Luni River on the Talod-Harsol Road, Prantij Taluka.	12	6	11,700
8	Saiat Tank Nala ..	12·5	8	10,955
9	Karjan River at Nandod, Rajpipla State ..	540	27	386,813
10	Malan River at Mahuva in Kathiawar ..	116	23¼	69,066
11	Kharl River at Palitana, Kathiawar ..	88	14¼	111,788
12	Navali River at Kundla in Bhavnagar State ..	15	6¼	48,180

Note (1):—*Mahi River.*—The flood level in the Mahi River had risen to 56 feet on 27th July 1913;
Panam River.—On 27th July 1913 the flood had risen about 40 feet above "zero of gauge".

VII.

Discharges from Catchment Areas.

Nature of Catchment.	Rate of Run-off, inches per hour.	Date of Flood.	Remarks.
GUJARAT.			
Hilly and woody	0·467	3rd August 1909.	
Goradu and black ..	0·62	24th July 1905.	
Black and sandy soil ..	0·50	Do.	
Hilly with murum	0·70	Do.	
Goradu, sandy	0·50	Do.	
Do.	0·62	Do.	
Murum and laterite	1·50	15th July 1905.	
Flat consisting of cultivated fields and grass lands.	1·32	19th July 1913 ..	The earthen dam breached.
Hilly area with trees, shrubs, etc.	1·11	27th June 1913 ..	20·36 inches of rain in 24 hours ending at 8 a.m. of the 28th June 1913 including the period of maximum fall of 5·24 inches in 2 hours, with an hourly intensity of 2 inches and 62 cents.
Up to first 8 miles length the catchment surface is barren and hilly and the remaining is flat cultivable lands.	0·92	12th June 1913 ..	According to Mahuva dispensary gauge. Inches. On 11th from 15 to 24 hours .. 7·10 On 12th ,, 0 to 2 ,, .. 4·65 ,, ,, 2 to 8 ,, .. 1·25 Total .. 13·00
Flat agricultural land devoid of trees and bushes.	1·98	Do. ..	20 inches of rain in 24 hours on 12th June 1913 and 15 inches in 6 hours on 15th June 1913 at Palitana gauge.
Barren rocky surface ..	4·88	Do. ..	According to Kundla dispensary gauge. Inches. On 11th from 16 to 22 hours 5·69 ,, ,, 22 to 23 ,, .. 4·00 ,, ,, 23 to 24 ,, .. 7·00 On 12th ,, 0 to 8 ,, .. 3·74 Total .. 20·43

i.e., about 16 feet above the section line recorded in the Executive Engineer's office.

Watrak River.—On 27th July 1913 the flood had risen about 40 feet above "zero of gauge".

STATEMENT

No.	Name of Stream.	Catchment area.	Length of Catchment area.	Discharge in cusecs.
		Acres.	Miles.	
13	Nala below Wangroli Tank, Thasra Taluka.	600	1	816
14	Nala below Savli Tank, Kapadvanj Taluka.	170	0·5	345
		Sq. miles.		DECCAN
15	Godavari at Kopargaon	2,880	60	172,200
				o
16	Godavari at Nandur-Madhmeshvar ..	1,650	48	179,889 196,187 120,168
17	Godavari at Gangapur ..	145	18	23,396 32,547 33,704
18	Ghataprabha at Dhupdal Weir	1,080	70	126,567 112,240 144,344 218,500
19	Girna, near Malegaon, Taluka Malegaon, Nasik.	1,064	....	179,318
20	Panjhra, near Madhi, Taluka Amalner, Khandesh.	1,057	....	184,959
21	Panjhra, near Nahalod, Taluka Dhulia, Khandesh.	802	....	177,018
22	Panjhra, near Dhulia, Taluka Dhulia, Khandesh.	714	....	172,037 334,500
23	Panjhra at Pankheda	52	10	17,704 19,966
24	Mula and Mutha Rivers at Jamsetji Bund near Poona.	804	36	20,603 188,934
25	Kumudwati River	540	46	....
26	Aner at Ganpur	502	35	169,168
27	Kukari at Shirapur	464	40·5	63,511 59,543 55,519
28	Vardha at Banvasi	444	16	36,218 86,729
29	Musam, near Malegaon, Taluka Malegaon, Nasik.	372	....	49,913 58,052
30	Koyna at Helwak	359	40	104,877 96,410 104,016 132,334 94,356 138,370
31	Kadwa at Palkhed	314	19½	84,696 58,583 26,411
32	Ghod at Nirgudsar	284	35	54,116 66,352
33	Panjhra near Nandwan, Taluka Pimpalner, Khandesh.	283	....	138,068 37,114

VII—*contd.*

Nature of Catchment.	Rate of Run-off, inches per hour.	Date of Flood.	Remarks.
GUJARAT—*concld.*			
Goradu cultivated ..	1·36	23rd July 1905.	
Goradu grass land ..	2·02	Do.	
(GHAT CATCHMENT).			
Bounded by Ghats (4,000 to 5,000) falling abruptly to murum and black soil plain (2,000).	0·093	27th July 1912 ..	The H. F. L. is chisel cut on the masonry pillar of the ferry boat on Kopargaon side approaches.
Ghat Catchment ..	0·17	17th August 1907.	
	0·184	22nd July 1912.	
	0·12	18th July 1914.	
Rock, murum, black and reddish soil.	0·25	13th September 1916.	
	0·35	6th October 1917.	
	0·36	27th July 1919.	
Ghat Catchment ..	0·18	15th July 1900.	
	0·16	4th August 1907.	
	0·207	23rd July 1912.	
	0·314	6th August 1914 ..	Great flood ever recorded since the construction of the weir, standing 7·5 feet above crest of weir for 3½ hours. Flood level on gauge was 29·5 feet on 6th August 1914 equivalent to R. L. 2015·5.
Rocky in the first reach, murum in the second and black soil in the last, Ghat Catchment.	0·26	Flood of 1896.	
	0·27		
	0·29		
Do. ...	0·33	Do.	
	0·73	27th June 1914 ..	The discharge of this flood is estimated, and as such is an approximate figure.
Half the catchment area in culturable soil and the rest hilly tracks composed of murum and boulders.	0·53	6th September 1916.	
	0·59	27th July 1919.	
	0·61	30th August 1924.	
.... ..	0·33	30th July 1896.	
Hilly tracks ..	0·1280	16th July 1882.	
Ghat Catchment ..	0·52	22nd July 1905.	
	0·20	16th September 1914.	
Ghat Catchment ..	0·20	4th August 1914.	
	0·19	26th October 1916.	
Hilly country consisting wholly of forest land of hard ground.	0·12	5th August 1916.	
	0·30	19th July 1925.	
	0·17	8th August 1926.	
Rocky In the first reach, murum in the second and black soil in the last, Ghat Catchment.	0·24	Flood of 1896.	
Steep hilly ground of the ghat description with much shrub jungle throughout.	0·45	14th July 1903.	
	0·42	24th July 1905.	
	0·45	2nd October 1910.	
	0·57	22nd July 1912.	
	0·41	19th July 1913.	
	0·59	18th July 1914.	
	0·37	29th June 1915.	
	0·25	5th July 1918.	
Partly hilly ..	0·13	13th September 1916.	
	0·27	27th August 1917.	
Ghat Catchment ..	0·36	26th October 1916.	
	0·73	29th August 1924.	
Rocky in the first reach, murum in the second and black soil in the last, Ghat Catchment.	0·204	Flood of 1896.	

STATEMENT

No.	Name of Stream.	Catchment area.	Length of Catchment area.	Discharge in cusecs.
		Sq. miles.	Miles.	DECCAN
34	Kukari at Edgaon ..	265	23	48,965 32,725 62,916
35	Tamrapami at Rajgoli ..	206	28	65,109
36	Lake Fife ..	196	24	81,270
37	Gunjawani at Mohori ..	183	24	35,719 31,890
38	Malaprabha at Khanapur ..	179	21	31,333
39	Malaprabha at Bhutewadi ..	126	17	13,004 43,419
40	Markandya at Shirur ..	165	24	107,703
41	Darna at Nandgaon ..	156	25	64,269 73,862
42	Bhima at Chas-Kaman ..	140	22	55,663 68,473
43	Ghataprabha at Hadlag ..	134	26	68,619 30,348
44	Lake Whiting ..	128	24	51,505
45	Tambdi and Girna ..	100	14½	165,102
46	Girna at Chankapur ..	100	10½	16,100 45,137
47	Kadwa at Karanjawan ..	96	12½	23,582 17,084 45,417
48	Harankashi at Ajra ..	94	14	22,083 20,422 46,504
49	Nira at Karanja ..	86	14	68,520 38,241 67,425
50	Krishna at Dhom ..	84	12½	17,690 20,548 17,548 25,572
51	Mina at Wadgaon ..	78	18½	26,337 45,477
52	Unanda at Wazerkhed ..	68	14	42,507 14,670 18,366
53	Karwa at Pimpalgaon ..	67	17	29,939 25,296 21,777
54	Nira at Apti (formerly called Nira at Natambi).	59	11½	32,375
55	Aundha Nala at Mukhne ..	52	18	25,188 44,418
56	Khandbara Tank on the Kan River ..	34	7	6,713 6,468 13,754
57	A small tributary of the Bedti River at the temporary bridge in mile 47 of the Karwar-Bellari Road.	20	8½	13,786 18,290 24,532
58	Mula at Chikalthan	581	51	31,752

VII—*contd.*

Nature of Catchment.	Rate of Run-off, inches per hour.	Date of Flood.	Remarks.
(GHAT CATCHMENT)—*contd.*			
Ghat Catchment ..	0·28	26th June 1913.	
	0·19	25th October 1916.	
	0·37	29th July 1919.	
Rocky in the first reach, murum and steep ground in the rest but country flat.	0·49	6th August 1914.	
....	0·641	24th July 1905 ..	The maximum run-off assumed for the design of the waste weir is ½ inch.
Ghat Catchment ..	0·30	27th June 1913.	
	0·27	8th July 1926.	
Rocky and steep throughout.	0·70	5th August 1914.	
Do. ..	0·16	3rd August 1916.	
	0·53	20th July 1923.	
Rocky for a small portion murum and soil in the rest.	1·01	6th August 1914.	
Steep rocky hill sides murum slopes, rice field with a fair proportion of black soil fields.	0·64	16th August 1907.	
	0·74	20th July 1913.	
Ghat Catchment ..	0·62	19th July 1913.	
	0·76	31st July 1923.	
Rocky in the first reach, murum and steep ground in the rest.	0·79	6th August 1914.	
	0·35	29th July 1915.	
....	0·62	25th July 1905 ..	The maximum run-off assumed for the design of the waste weir is ⅜ inch.
Hilly, rocky and steep ..	2·56	22nd July 1912 ..	Gauged by increased volume in the tank; waste weir did not overflow.
	0·25	15th August 1916.	
Murum ..	0·66	14th August 1907.	
	0·38	5th August 1915.	
	0·28	21st August 1918.	
	0·73	27th July 1919.	
Rocky in the first reach, murum and steep ground in the rest but country flat.	0·36	29th July 1915.	
	0·34	3rd August 1916.	
	0·77	20th July 1923.	
	1·23	25th July 1905.	
Ghat Catchment ..	0·69	2nd October 1910.	
	1·21	18th July 1913.	
	0·32	1st July 1915.	
	0·37	5th August 1916.	
Steep hilly country of the Ghat description with few trees.	0·32	15th August 1916.	
	0·48	28th July 1921.	
	0·49	19th July 1923.	
	0·90	22nd July 1912.	
Ghat Catchment ..	0·84	26th October 1916.	
	0·33	5th August 1915.	
Murum and reddish soil ..	0·42	28th September 1917.	
	0·68	2nd October 1919.	
	0·58	1st September 1926.	
Rocky, murum, black and reddish soil.	0·50	5th September 1916.	
Ghat Catchment .	0·85	24th July 1921.	
Rocky, murum, black and reddish soil.	0·75	2nd August 1909.	
	1·32	8th August 1910.	
	0·31	26th August 1917.	
	0·29	6th July 1918.	
Ghat Catchment ..	0·63	27th July 1919.	
	0·63	19th September 1921.	
	0·83	25th July 1923.	
Do. ..	1·92	6th August 1914.	
Ghat catchment, black and reddish soil and rocky near hills.	0·08	16th August 1926.	

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STATEMENT

No.	Name of Stream.	Catchment area.	Length of Catchment area.	Discharge in cusecs.
		Sq. miles.	Miles.	DECCAN
59	Mula at Kahuri	900	64	31,941
				DECCAN
60	Raipur Tank on the Waghur River ..	700	24	47,795 40,114
61	Mula at Tas ..	592	51	94,965 100,341 117,910
62	Bori ..	446	....	115,170
63	Seena at Hatwalan ..	446	27	63,420
64	Yerla at Yeralwadi ..	274	32	31,242
65	Sina River at iron bridge (Poona-Nagar Road).	150	17	58,117
66	Parmapada Tank on the Bori River ..	117	25	37,735
67	Burai, near Wazdara, Taluka Pimpalner, Khandesh.	87	....	17,596
68	Maini Tank—Wang River—a tributary of the Yerla.	52	8¼ (The catchment area is 11⅓ miles at greatest breadth).	25,500 7,000 14,200 37,000 22,400
69	Valumba Nala at point where it crosses Nagar-Dhond Road in mile No. 11.	48	12·5	28,426
70	Bori, near Tingri, Taluka Malegaon, Nasik ..	43	....	64,637
71	Odal at Khadakosath ..	38	12	13,595
72	Muchkundi Tank ..	26	7	23,693
73	Nasardi River at Nasik ..	25	12	19,074 22,494
74	Nala near Vilad Railway Station, mile 9 of Nagar-Malegaon Road.	11	3·5	11,995
75	Jamphal Nala near Songir, Taluka Dhulia, Khandesh.	10	....	5,902
76	Sina Nala at Shendi on Nagar-Paithan Road..	9·5	6	8,104
77	Wazarya Nala near Nahalod ..	7	....	5,970
78	Banhole Nala ..	7	3½	3,235

VII—*contd.*

Nature of Catchment.	Rate of Run-off, inches per hour.	Date of Flood.	Remarks.
(GHAT CATCHMENT)—*concld.*			
Ghat catchment black and reddish soil and rocky near hills.	0·05	16th August 1926.	
(DECCAN CATCHMENT).			
Rocky in the first reach, murum and soil in the rest.	0·11 0·09	29th September 1917. 3rd July 1926.	
Black and reddish soil and rocky near hills.	0·25 0·26 0·31	26th June 1913. 18th July 1914. 26th October 1916.	
Local Deccan Catchment ..	0·403	18th July 1889.	
Black Khalga soil, murum and rock near hills.	0·22	23rd June 1913.	
Hilly at the sides with deep black and brownish black soil in the valley between.	0·18	10th September 1916.	
Ordinary soil ..	0·60	19th August 1910 ..	Water crossed main roads, city side of bridged 9 inches in depth.
Rocky in the first reach, murum and soil in the rest.	0·17	6th October 1917.	
Local Deccan Catchment ..	0·31	Flood of 1896.	
....	0·76	23rd and 24th Sept. 1874.	Water rose to 4·5 feet above crest of weir.
....	....	....	
	0·42	22nd September 1885.	
Fan-shaped catchment, fringed on one side by hills standing about 800 feet above tank level. Soil principally of the black Deccan variety.	1·11	October 1889 ..	This very extraordinary flood is the greatest of which anything is known. It topped the waste weir by 6 feet.
....	0·66	12th September 1899 ..	This flood rose 3·9 feet above wasteweir.
Most in murum not Ghat Catchment 2,200 feet above sea level.	0·91	31st August 1910 ..	This flood rose 2 or 3 feet higher, in Walki village 3½ miles below roads than ever previously and washed away 20 or more houses and damaged the Police Lines.
Local Deccan Catchment ..	2·34	Flood of 1896.	
Murum, red and black soil ..	0·55	12th September 1916.	Greatest height was 15·95 feet, giving mean area of 2,214 sq. feet.
Partially hilly ..	1·41	2nd November 1916 ..	The discharge given is for the highest flood.
Murum, earth, etc. ..	1·18 1·39	13th June 1909. 1st October 1910.	
Ordinary soil (small hillocks) ..	1·60	19th September 1910 ..	The Camp of R. D. Fusiliers was washed away.
Local Deccan Catchment ..	0·92	Flood of 1896.	
Basin-shaped with hills 500 feet. ..	1·30	31st August 1910 ..	The flood damaged a large part of Shendi village which had not before been reached by a flood.
....	0·79	27th June 1914 ..	The discharge of this flood is estimated, and as such is an approximate figure.
Murum, black and reddish soil ..	0·72	6th September 1916.	

STATEMENT

No.	Name of Stream.	Catchment area.	Length of Catchment area.	Discharge in cusecs.
		Sq. miles.	Miles.	DECCAN
79	Nala No. 15 on Palkhed Canal ..	2·5	2½	3,204
80	Dhomna Nala, Nasik Irrigation Division ..	1·50	1·25	2,192
81	Ekruk Tank ..	For the great	flood at Ekruk,	reference may
82	Manad at Dam site	342	16·5	31,366
				GODAVARI
83	Deo Nala at Aqueduct No. 3 on the Godavari Right Bank Canal.	135	24	49,555
84	Kolgaon Nala at Aqueduct No. 7 on the Godavari Right Bank Canal.	110	18·5	65,976
85	Kat Nala at Aqueduct No. 15 ..	45	8	13,210
86	Dambar Nala at Aqueduct No. 4 on the Godavari Right Bank Canal.	20	7	35,062
87	Nala at mile 19—684 feet of the Godavari Right Bank Canal.	2·5	1·5	2,625
				GODAVARI
88	Nala No. 47 at mile 47—798 feet, Aqueduct No. 23 on Godavari Left Bank Canal,	72·75	17·5	47,812
89	Nala No. 26 at mile 24—2,837 feet, Aqueduct No. 12 on Godavari Left Bank Canal.	35·5	15	14,233
90	Nala No. 2 mile 1—1,300 feet, Culvert No. 1-B on Godavari Left Bank Canal.	12·8	6·25	16,203
91	Nala No. 32 ..	0·4	1	762
92	Nala No. 39 ..	1	1·5	1,980
				PRAVARA
93	Lendi Nala at mile 4 of Pravara Left Bank Canal.	8	5	7,450
94	Nala No. 37	0·96	1·5	380 3

VII—*concld.*

Nature of Catchment.	Rate of Run-off, inches per hour.	Date of Flood.	Remarks.
(DECCAN CATCHMENT)—*contd.*			
Black soil and murum ..	1·98	13th June 1909.	
Hilly and flat country with rock, murum and soil at surface.	2·26	14th June 1908.	
be made to the statement on	page 57.		
Flat murum ..	0·14	12th September 1926.	
RIGHT BANK CANAL.			
Ordinary Deccan, rises in fort hills.	0·57	1st October 1910.	
Ordinary flat, Deccan plain catchment, Nala rises in fort hills.	0·93	Do.	
Soil and soft murum below ..	0·45	23rd June 1915.	
Flat and devoid of trees, red soil and murum on surface.	2·70	1st October 1910.	
Flat cultivated land of light soil with murum near surface.	1·64	12th June 1910.	
LEFT BANK CANAL.			
Ordinary Deccan catchment, rising in small hills.	1·02	1st October 1910.	
Mostly black soil, rises in fort hills near Manmad.	0·62	Do.	
Mostly black soil, rises in small hills near Vinchur.	....	Do.	
Soil on surface	2·98	26th June 1913.	
Do.	3·1	22nd June 1913.	
LEFT BANK CANAL.			
Soil	1·44	28th September 1910.	
Soil and murum below ..	0·61	23rd June 1913.	

ADDENDA TO STATEMENT VII.

AHMEDABAD DIVISION.

Description of the flood which occurred on the 3rd August 1909 on the Hathmati River at Himatnagar (Ahmednagar) in the Idar State.

The maximum intensity of the flood at the weir on the Hathmati River at Himatnagar (Ahmednagar) in the Idar State is calculated as .. .. 158,112 cusecs.

The length of weir .. .. 1,040 feet.

Height of water above crest—

Upstream .. .. 12·50 feet.
Downstream .. .. 5·75 feet.

Velocity of approach 6 feet per second.

The corresponding (maximum) rate of run-off per hour from the catchment is .. .. .. 0·467 inch.

The catchment area is .. .. .. 524 sq. miles.

The greatest length of the catchment area is .. 40 miles.

The catchment is both hilly and woody.

The rainfall measured at the weir site was 7 inches in 14 hours and at the centre of the catchment 10 inches. The rainfall was probably greater on the hills.

ADDENDA TO STATEMENT VII—*contd.*

SHOLAPUR DIVISION.

Statement of discharges from the Catchment of the Ekruk Tank as observed in September 1872.

Time of observation.	Level of water surface.	Quantity impounded between these levels in c. ft.	Quantity discharged from the tank over two waste weirs.*	The total in-flow into the tank during period (total of columns 3 and 4).
1	2	3	4	5
19th September 8 P. M. ..	R. L. 203·00			
		190,536,000	....	190,536,000
20th „ 4 A. M. ..	„ 204·00			
		404,160,000	5,760,000	409,920,000
„ „ 6 A. M. ..	„ 206·00			
		430,944,000	124,200,000	564,144,000
„ „ 4 P. M. ..	„ 208·00			
		1,480,536,000	440,596,800	1,930,132,800
„ „ 10 P. M. ..	„ 214·00			

Time of observation.	The length of time.	Catchment area of tank.	Run-off in inches per hour over the catchment.	Remarks.
	6	7	8	9
19th September 8 P. M. ..				
	8 hours.		·064	
20th „ 4 A. M. ..				
	2 „		·558	
„ „ 6 A. M. ..				
	10 „		·153	
„ „ 4 P. M. ..				
	6 „	159 Square Miles.	·870	
„ „ 10 P. M. ..				

* The discharge is assumed to be mean of the discharge at two levels.

ADDENDA TO STATEMENT VII—*concld.*

MUTHA CANALS DIVISION.

Statement of discharges from the Catchment of Lake Fife as observed on 24th July 1905.

(Area 196 sq. miles.)

Hour of observation.	Height of water in the tank above sills of outlet sluices.	Discharge from the waste weir at the hour of observation.	Mean discharge.	Discharge necessary to produce the rise of water in the tank at a uniform rate.	Total average discharge.	Remarks.
1	2	3	4	5	6	7
	Feet.	Cusecs.	Cusecs.	Cusecs.	Cusecs.	
2 p.m.	32·35	48,259				
			52,188	29,181	*81,270	*As the rate of rise must have been high in the beginning of the hour, the discharge could not have been less than 48,259 + 29,081 = 77,340 cusecs.
3 p.m.	33·00	56,118				
			58,330	15,747	74,077	
4 p.m.	33·35	60,563				
			62,178	11,300	73,478	
5 p.m.	33·60	63,793				
			65,321	11,318	76,640	
6 p.m.	33·85	66,850				

DHARWAR IRRIGATION DIVISION.

Statement of discharges from the Catchment of the Dhupdal Reservoir as observed on the 5th August 1914.

(Area of Catchment 1,080 sq. miles.)

Hour of observation.	Height of water in the tank above sills of under sluices.	Discharges over the weir and through the under-sluices at the hour of observation.	Mean discharge.	Discharge necessary to produce the rise of water in the tank at a uniform rate.	Total average discharge.	Remarks.
1	2	3	4	5	6	7
	Feet.	Cusecs.	Cusecs.	Cusecs.	Cusecs.	
6 a.m.	27·70	146,797				
			148,657	1,697	150,354	
7 a.m.	27·80	150,518				
			153,362	2,546	155,908	
12 a.m.	27·95	156,205				
			157,158	1,273	158,431	
2 p.m.	28·00	158,111				
			160,111	2,715	162,826	
4 p.m.	28·10	162,111				

STATEMENT VIII.

Observed Deposit of Silt in Tanks.

Name of Tank.	Year.	Catchment area.	Original capacity.	Total silt deposit since construction.	Number of years since construction.	Rate of total deposit in million cubic feet per square mile per year.	Rate of deposit in million cubic feet per square mile for the year.	Remarks.
1	2	3	4	5	6	7	8	9
		Sq. miles	M. cft.	M. cft.				M. cft.
Muchkundi Tank.	1906	26	703·59	57·85	22	0·10	..	Rate of silting since construction of the tank till 1906 was .. ·10
	1910			63·69	26	0·094	..	From 1906 to 1910 .. ·056
	1924-25			113·70	41	0·10	1·92	From 1910 to 1924-25 1·92
Gokak Basin.	1905	1,080	1468·437 up to R. L. 2012, *i.e.*, 4 ft. above Permanent crest of the weir.					Deposit up to 1921-22 = 196·18 M. cft. Deposit up to 1923-24 = 166·42 M. cft. *i.e.*, 29·76 M. cft. washed away. Deposit up to 1924-25 = 213·36 M. cft. *i. e.*, 46·94 M. cft. deposited in one year. During the last two years 7·44 M. c. ft. silt washed away.
	1909			14·19	14	0·001	0·002*	
	1910			155·079	18	0·008	..	
	1911			173·59	19	0·0085	0·0171	
	1912			189·39	20	0·0088	0·0146	
	1916			207·97	21	0·0092	0·0172	
	1917			§189·97†	25	§0·007036	§..‡	
	1919			§228·71	26	§0·0081	§0·036	
	1920			296·00	28	0·0098	¶0·0117	
	1921			192·02(*a*)	29	0·00613	Nil	
	1923-24			196·18	30	0·00606	0·00385	
	1924-25			166·42(*b*)	32	0·0048	0·043	
	1926-27			213·36	33	0·006	.	
				205·93	35	0·005	—0·007	
Dambal Tank.	1896 to 1912	43	114·18	15·71	36	**9·017	‡‡ 0·0229	The first improvements to this old tank were carried out in 1876. The capacity was calculated in 1896 and found to be 114·18 M. cft.
	1912 to 1914			18·43	38		‡‡ 0·0316	
	1914 to 1923			20·08	47		‡‡ 0·0042	
	1923-24			20·22	48		‡‡ 0·0023	
Mavinkop Tank.	1909 to 1912	6·25	43·29	5·54	31	††0·078	‡‡ 0·295	The first improvements to this old tank were carried out in 1878. The capacity was calculated in 1909 and found to be 43·29 M. cft.
	1912 to 1914			6·27	36		‡‡ 0·0584	
	1914 to 1923			7·06	45		‡‡ 0·014	
	1923-24			7·32	46		‡‡ 0·042	

Note.—For the figures of silt deposits in Maini, Dambal, Asundi, Pingli and Kelgeri Tanks, prior to 1906, reference may be made to the Statement printed at page 12 of the Report of 1906.

* Calculated on the silt deposited during 1903-04 and 1904-05.

† The difference between the total silt deposit till 1912 and that till 1916 is due to the fact that 18·00 M. cft. of silt was washed away from 1912 to 1916.

‡ This quantity cannot be ascertained as the observations have been made after 4 years since they were last undertaken.

§ Results reported not reliable.

¶ Average deposit per year per square mile or catchment since 1912. Figures for the years 1916 and 1917 are reported to be unreliable. Therefore those for the year 1912 have been taken in calculating this figure.

(*a*) The difference between the figures of the total silt deposit till 1919 and 1920 is due to the fact that 104·58 M. cft. of silt was washed away in 1920, and this gives a rate of ·097 M. cft. per square mile for the year.

** Calculated from the year 1896 to 1923.

†† Calculated from the year 1909.

‡‡ For the periods mentioned in Column 2.

(*b*) The difference between the total silt deposit till 1921 and that till 1923-24 was due to the fact that 29·76 M. cft. silt was washed away during the period of two years.

STATEMENT VIII—*contd.*

Name of Tank.	Year.	Catchment area.	Original capacity.	Total silt deposit since construction.	Number of years since construction.	Rate of total deposit in million cubic feet per square mile per year.	Rate of deposit in million cubic feet per square mile for the year.	Remarks.
1	2	3	4	5	6	7	8	9
Ekruk Tank.	1870	Sq. miles 159	M. cft. 3,162·18	M. cft.	..	....		Work on the Ekruk tank was taken in hand in December 1866 and the dam was closed in December 1869. For silt deposit the year of completion is taken 1870. Net capacity of the tank is 2,616·53 as found out by actual survey of the tank in the year 1923. No survey was made for observing silt deposit before 1923 nor has it been possible to do so after 1923 to date since there has usually been a large amount of water in the tank during the period 1924-26.
	1923			545·65	53	0·6475		
Koregaon Tank.	1903 to 1920	7	104·76					The Koregaon tank was taken in possession of P. W. D. in 1886 after improvements. The capacity was calculated in 1903 and found to be 104·76 M. cft. The result of the recent silt survey not being ready the old figure of net contents, viz., 84·35 M. cft. was reported in the comparative statement of dimensions and cost of storage works submitted by the Superintending Engineer, Central Circle, under his No. 6004, dated 17th August 1925. After the survey in 1926 the net capacity was found to be 83·47 M. cft.
	1920 to 1925		84·35	21·29	22	0·1382	From 1920 to 1925 was 0·251 M.cft. per sq. mile per year.	

STATEMENT VIII—*concld.*

Name of Tank.	Year.	Catchment area.	Original capacity.	Total silt deposit since construction.	Number of years since construction.	Rate of total deposit in million cubic feet per square mile per year.	Rate of deposit in million cubic feet per square mile for the year.	Remarks.
1	2	3	4	5	6	7	8	9
		Sq. miles	M. cft.	M. cft.				
Mayani Tank.	1891 to 1906	52·00	188·59	186·58	33	0·109	0·098	The Mayani tank was constructed in 1873 and brought into operation during 1875-76. Improvements were carried out in 1891. The capacity in 1906 was 112 M. cft. The F. S. Z. was raised by four ft. from 2,300·52 to 2,3045·2 in the year 1906 when the contents of the tank were increased from 112·00 M. cft. to 185·00 M. cft. and in 1914 the capacity was 114·900 M. cft. In 1924 the capacity was 75·009 M. cft.
	1906 to 1914		185·00				0·169	
	1914 to 1924		114·90				0·077	
Near Tank	1880 to 1924		489·77	2·67	44	0·031		The capacity of the Nehr tank in 1924 was 406·80 M. cft.

STATEMENT IX.

Statement showing the results of observations on evaporation for the year 1926-27.

Name of tank.	Year and month.	Number of days on which observations were taken.	Daily average evaporation in feet.	Remarks.
1	2	3	4	5
Gokak Canal 1st Section and storage works at Dhupdal, Dharwar Irrigation Division.	May 1926 ..	31	0·033	
	June 1926 ..	..	..	On account of rains observations could not be taken.
	July 1926 ..	..	..	
	August 1926 ..	..	..	
	September 1926 ..	..	..	
	October 1926 ..	23	0·01	Observations for evaporation were made as usual by means of the iron tank.
	November 1926 ..	30	0·01	
	December 1926 ..	31	0·016	
	January 1927 ..	31	0·017	
	February 1927 ..	28	0·02	
	March 1927 ..	31	0·024	
	April 1927 ..	30	0·29	
Michkundi Tank, Bijapur Division.	May 1926 ..	..	..	The tank was dry.
	June 1926 ..	4	0·03	Periods were selected in each month when there was no inflow or sluice discharge. The fall in water level during these periods was noted from which the daily rate of evaporation was calculated.
	July 1926 ..	19	0·026	
	August 1926 ..	26	0·030	
	September 1926 ..	17	0·027	
	October 1926 ..	29	0·033	
	November 1926 ..	17	0·040	
	December 1926 ..	..	..	The tank was dry.
	January 1927 ..	..	..	
	February 1927 ..	..	..	
	March 1927 ..	..	..	
	April 1927 ..	..	..	

STATEMENT IX—*contd.*

Name of tank.	Year and month.	Date.	Number of days.	Total loss in feet.	Average loss per day in feet.	Remarks.
1	2	3	4	5	6	7
Ekruk Tank* ..	May 1926 ..	24th to 27th ..	3	0·07	0·023	
	June 1926 ..	19th to 22nd ..	3	0·05	0·017	
	July 1926 ..	21st to 24th ..	3	0·03	0·01	
	August 1926 ..	25th to 28th ..	3	0·03	0·01	
	September 1926.	....	..	..	..	Observations could not be made owing to inflow in the tank.
	October 1926 ..	....	..	..	..	Results unreliable.
	November 1926.	8th to 11th ..	3	0·03	0·01	
	December 1926 .	12th to 15th ..	3	0·04	0·013	
	January 1927 ..	10th to 13th ..	3	0·04	0·013	
	February 1927..	4th to 7th ..	3	0·04	0·013	
	March 1927 ..	17th to 20th ..	3	0·05	0·016	
	April 1927 ..	26th to 29th ..	3	0·06	0·020	
Pathri Tank* ..	May 1926 ..	7th to 10th ..	3	0·06	0·02	
	June 1926 ..	2nd to 5th ..	3	0·09	0·03	
	July 1926 ..	17th to 20th ..	3	0·015	0·005	
	August 1926 ..	22nd to 25th ..	3	0·01	0·0033	
	September 1926.	....	..	..	..	Observations could not be made owing to inflow in the tank.
	October 1926 ..	....	..	..	..	
	November 1926 .	24th to 27th ..	3	0·02	0·006	
	December 1926..	17th to 20th ..	3	0·03	0·01	
	January 1927 ..	16th to 18th ..	2	0·02	0·01	
	February 1927..	15th to 18th ..	3	0·03	0·01	
	March 1927 ..	16th to 19th ..	3	0·03	0·01	
	April 1927 ..	23rd to 26th ..	3	0·10	0·033	

* Loss due to evaporation only observed in the iron tank 6′ × 6′ which is suspended and kept floating in the tank.

STATEMENT IX—*contd.*

Name of tank.	Year and month.	Date.	Number of days.	Total loss in feet.	Average loss per day in feet.	Remarks
1	2	3	4	5	6	7
Ashti Tank* ..	May 1926 ..	17th to 20th ..	3	0·12	0·04	
	June 1926 ..	20th to 23rd ..	3	0·06	0·02	
	July 1926 ..	17th to 19th ..	2	0·02	0·01	
	August 1926 ..	15th to 18th ..	3	0·02	0·007	
	September 1926.	5th to 8th ..	3	0·05	0·017	
	October 1926 ..	12th to 15th ..	3	0·09	0·03	
	November 1926 .	13th to 16th ..	3	0·05	0·0167	
	December 1926..	9th to 12th ..	3	0·06	0·02	
	January 1927 ..	12th to 15th ..	3	0·05	0·0167	
	February 1927..	16th to 19th ..	3	0·07	0·0233	
	March 1927 ..	10th to 13th ..	3	0·07	0·0233	
	April 1927 ..	10th to 13th ..	3	0·08	0·0267	
Muktl Tank* ..	May 1926 ..	....	..	..	..	Observations could not be made as the staff was engaged for letting out water, there being heavy demand for it.
	June 1926	....	..	..	..	
	July 1926 ..	....	..	..	..	No observations taken as there was drizzling and the sky was cloudy.
	August 1926 ..	....	..	..	..	
	September 1926.	....	..	..	..	

* Loss due to evaporation only observed in the iron tank 6′ × 6′ which is suspended and kept floating in the tank.

STATEMENT IX—*contd.*

Name of tank.	Year and month.	Date.	Number of days.	Total loss in feet.	Average loss per day in feet.	Remarks.
1	2	3	4	5	6	7
Mukti Tank — *concld.*	October 1926 ..	27th to 30th ..	3	0·048	0·016	
	November 1926 .	27th to 30th ..	3	0·043	0·014	
	December 1926..	28th to 31st ..	3	0·038	0·013	
	January 1927 ..	28th to 31st ..	3	0·051	0·017	
	February 1927..	25th to 28th ..	3	0·057	0·019	
	March 1927 ..	....	..	..	..	Observations could not be made as the tank was dry.
	April 1927 ..	....	..	..	..	
Mhaswa Tank.*	May 1926 ..	25th to 29th ..	4	0·173	0·043	
	June 1926 ..	9th to 13th ..	4	0·170	0 0427	
	July 1926 ..	....	..	..	..	There being rainfall observations were not reliable.
	August 1926 ..	....	..	..	..	Observations could not be made owing to rain.
	September 1926.	19th to 23rd ..	4	0·060	0·015	
	October 1926 ..	19th to 23rd ..	4	0·033	0·008	
	November 1926.	....	..	..	..	Results unreliable.
	December 1926.	18th to 22nd ..	4	0·072	0·018	
	January 1927 ..	25th to 29th ..	4	0·063	0·016	
	February 1927..	16th to 20th ..	4	0·066	0·0165	
	March 1927 ..	19th to 23rd ..	4	0·064	0·016	
	April 1927 ..	24th to 28th ..	4	0·134	0·0335	
Hartala tank.*	May 1926 ..	....	..	..	..	Observations could not be made as the tank was dry.
	June 1926 ..	....	..	..	..	
	July 1926 ..	....	..	..	..	
	August 1926 ..	....	..	..	..	Observations could not be made owing to rain.
	September 1926.	23rd to 28th ..	5	0·050	0·010	
	October 1926 ..	21st to 25th ..	4	0·042	0·10	
	November 1926 .	23rd to 27th ..	4	0·036	0·009	
	December 1926 .	20th to 24th ..	4	0·047	0·012	
	January 1927 ..	18th to 22nd ..	4	0·037	0·0092	
	February 1927..	....	..	..	..	Observations could not be made as the tank was dry.
	March 1927 ..	....	..	..	..	
	April 1927 ..	....	..	..	..	

* Loss due to evaporation only observed in the iron tank 6′ × 6′ × 3′ kept floating.

STATEMENT IX—*contd.*

Name of tank.	Year and month.	Date and hour of observation.	Number of days.	Total loss in feet.	Average loss per day in feet.	Remarks.
1	2	3	4	5	6	7
Lake Whiting.*	May 1926 ..	30th April (6 p.m.) to 31st May (6 p.m.).	31	1·08	0·03484	
	June 1926 to October 1926.	....	..	..	..	Inflow in tank.
	November 1926.	31st Oct. (6 p.m.) to 30th Nov. (6 p.m.).	30	0·45	0·01500	
	December 1926.	30th Nov. (6 p.m.) to 31st Dec. (6 p.m.).	31	0·65	0·02097	
	January 1927 ..	31st December 1926 (6 p.m.) to 31st Jan. 1927 (6 p.m.).	31	0·80	0·02581	
	February 1927..	31st Jan. (6 p.m.) to 28th Feb. (6 p.m.)	28	0·70	0·02500	
	March 1927 ..	28th Feb (6 p.m.) to 31st Mar. (6 p.m.).	31	0·93	0·03000	
	April 1927 ..	31st Mar. (6 p.m.) to 30th Apr. (6 p.m.).	30	0·95	0·03167	

* Loss due to evaporation only observed in the iron tank 6' × 6' × 3' kept floating.

STATEMENT IX

STATEMENT

Statement showing the results of observations for the total losses including

Name of tank.	Month and year.	Date.	Number of days.	Gauge reading at commencement.	Total loss.	Average loss per day.
1	2	3	4	5	6	7
				Feet.	Feet	Feet.
Ekruk Tank ..	May 1926 ..	24th to 27th ..	3	1512·30	0·10	0·033
	June 1926 ..	19th to 22nd ..	3	1511·40	0·10	0·033
	July 1926 ..	21st to 24th ..	3	1511·00	0·12	0·040
	August 1926 ..	25th to 28th ..	3	1511·47	0·07	0·023
	September 1926 ..	.... ..	..	..	..	..
	October 1926 ..	.... ..	..	..	..	..
	November 1926 ..	8th to 11th ..	3	1516·27	0·10	0·033
	December 1926 ..	12th to 15th ..	3	1514·94	0·07	0·023
	January 1927 ..	10th to 13th ..	3	1514·10	0·12	0·040
	February 1927 ..	4th to 7th ..	3	1513·25	0·07	0·024
	March 1927 ..	17th to 20th ..	3	1512·32	0·08	0·027
	April 1927 ..	26th to 29th ..	3	1510·92	0·09	0·031
Pathri Tank ..	May 1926 ..	7th to 10th ..	3	233·45	0·09	0·030
	June 1926 ..	2nd to 5th ..	3	232·36	0·16	0·053
	July 1926 ..	17th to 20th ..	3	232·30	0·03	0·010
	August 1926 ..	22nd to 25th ..	3	237·32	0·02	0·007
	September 1926 ..	.... ..	..	..	..	..
	October 1926 ..	.... ..	..	..	..	..
	November 1926 ..	24th to 27th ..	3	239·80	0·15	0·05
	December 1926 ..	17th to 20th ..	3	238·56	0·06	0·02
	January 1927 ..	16th to 18th ..	2	233·10	0·04	0·02
	February 1927 ..	15th to 18th ..	3	235·06	0·06	0·020
	March 1927 ..	16th to 19th ..	3	235·18	0·07	0·023
	April 1927 ..	20th to 26th ..	6	233·96	0·18	0·06
Ashti Tank ..	May 1926 ..	17th to 20th ..	3	224·28	0·15	0·050
	June 1926 ..	20th to 23rd ..	3	223·62	0·09	0·030
	July 1926 ..	17th to 19th ..	2	225·28	0·02	0·010
	August 1926 ..	15th to 18th ..	3	225·19	0·03	0·01
	September 1926 ..	5th to 8th ..	3	224·63	0·14	0·047

IX—*contd.*

evaporation, leakage, percolation and absorption for the year 1926-27.

Date of rainfall.	Rainfall.	Replenishment.	Distribution of loss.			*Remarks.
			Evaporation.	Leakage.	Percolation and absorption.	
8	9	10	11	12	13	14
	Inches.	o Feet.	Feet.	Feet.	Feet.	
..	..	..	0·023	*Nil.*	0·004	0·003 Loss by water supply to Municipality and 0·003 discharge from outlet in canal for irrigation.
..	..	..	0·017	*Nil.*	0·006	0·003 Loss by water supply to Municipality and 0·007 discharge from outlet in canal for irrigation.
..	..	..	0·10	*Nil.*	0·006	0·004 Loss by water supply to Municipality and 0·02t discharge from outlet in canal for irrigation.
..	..	..	0·01	*Nil.*	0·010	0·003 Loss by water supply to Municipality.
..	..	..	..	..	..	Observations could not be made owing to inflow in the tank.
..	..	..	..	..	..	Results unreliable.
..	..	..	0·01	*Nil.*	0·008	0·002 Loss by water supply to Municipality and 0·013 discharge from outlet in canal for irrigation.
..	..	..	0·013	*Nil.*	0·003	0·002 Loss by water supply to Municipality.
..	..	..	0·013	*Nil.*	0·009	0·003 Loss by water supply to Municipality and 0·015 discharge from outlet in canal for irrigation.
..	..	..	0·013	*Nil.*	0·008	0·003 Loss by water supply to Municipality.
..	..	..	0·016	*Nil.*	0·008	0·003 Do
..	..	..	0·02	*Nil.*	0·008	0·003 Do.
..	..	..	0·02	*Nil.*	0·007	0·003 Do.
..	..	..	0·03	*Nil.*	0·019	0·004 Do.
..	..	..	0·005	*Nil.*	0·002	0·003 Do.
..	..	..	0·0033	0·00003	0·0018	0·0023 Discharge from outlet in canal for irrigation.
..	..	..	..	..	..	Observations could not be made owing to inflow in the tank.
..	..	..	..	..	..	
..	..	..	0·0060	*Nil.*	0·0251	0·0026 Loss by water supply to Municipality and 0·0157 discharge from outlet in canal for irrigation.
..	..	..	0·01	0·0003	0·0068	0·0027 Loss by water supply to Municipality.
..	..	..	0·01	0·0003	0·0066	0·0033 Do.
..	..	..	0·01	0·0004	0·0054	0·0038 Do.
..	..	..	0·01	0·0003	0·0096	0·0039 Do.
..	..	..	0·033	0·0001	0·0214	0·0042 Do.
..	..	..	0·04	*Nil.*	0·010	
..	..	..	0·02	*Nil.*	0·010	
..	..	..	0·01	*Nil.*	..	
..	..	..	0·007	0·00003	0·003	0·0005 Discharge from outlet in canal for irrigation.
..	..	..	0·017	0·00004	0·0034	0·0263 Do.

STATEMENT

Name of tank.	Month and year.	Date.	No. of days.	Gauge reading at commencement.	Total loss.	Average loss per day.
1	2	3	4	5	6	7
				Feet.	Feet.	Feet.
Ashti Tank —*concld.*	October 1926 ..	12th to 15th ..	3	228·25	0·16	0·055
	November 1926 ..	13th to 16th ..	3	226·41	0·08	0·027
	December 1926 ..	9th to 12th ..	3	225·24	0·15	0·05
	January 1927 ..	12th to 15th ..	3	223·66	0·18	0·06
	February 1927 ..	10th to 10th ..	3	222·33	0·10	0·037
	March 1927 ..	10th to 13th ..	3	221·75	0·09	0·03
	April 1927 ..	10th to 13th ..	3	220·79	0·12	0·039
Mukti Tank ..	May 1926 ..	.... ..	..	..	..	..
	June 1926 ..	.... ..	..	..	..	..
	July 1926 ..	.... ..	..	..	..	..
	August 1926 ..	.... ..	..	..	..	..
	September 1926 ..	.... ..	..	..	..	..
	October 1926 ..	27th to 30th ..	3	916·32	0·08	0·026
	November 1926 ..	27th to 30th ..	3	914·07	0·08	0·027
	December 1926 ..	28th to 31st ..	3	911·47	0·07	0·0_2
	January 1927 ..	28th to 31st ..	3	903·93	0·00	0·030
	February 1927 ..	25th to 28th ..	3	905·62	0·010	0·033
	March 1927 ..	.... ..	..	..	..	..
	April 1927 ..	.... ..	..	..	..	..
Mhaswa Tank ..	May 1926 ..	25th to 29th ..	4	10·80	0·20	0·05
	June 1926 ..	9th to 13th ..	4	10·00	0·20	0·05
	July 1926 ..	.... ..	..	..	..	..
	August 1926 ..	.... ..	..	..	..	..
	September 1926 ..	19th to 23rd ..	4	22·27	0·12	0·03
	October 1926 ..	19th to 23rd ..	4	21·62	0·04	0·01
	November 1926 ..	.... ..	..	..	..	..
	December 1926 ..	18th to 22nd ..	4	18·90	0·25	0·062
	January 1927 ..	25th to 29th ..	4	17·02	0 22	0·055
	February 1927 ..	16th to 20th ..	4	15·26	0·16	0·04
	March 1927 ..	19th to 23rd ..	4	12·68	0·10	0·025
	April 1927 ..	24th to 28th ..	4	11·17	0·15	0·0375

IX—*contd.*

Date of rainfall.	Rainfall.	Replenishment.	Distribution of loss.			Remarks.
			Evaporation.	Leakage.	Percolation and absorption.	
8	9	10	11	12	13	14
o	Inches.	Feet.	Feet.	Feet.	Feet.	
..	..	..	0·03	0·00003	0·00144	0·0232 Discharge from outlet in canal for irrigation.
..	..	..	0·0167	0·00003	0·00036	0·00993 Do.
..	..	..	0·02	0·00004	0·00100	0·02949 Do.
..	..	..	0·0167	0·00004	0·00247	0·04056 Do.
..	..	..	0·0233	0·00004	0·00060	0·00420 Do.
..	..	..	0·0233	0·00004	0·00480	0·00150 Do.
..	..	..	0·02670	0·00004	0·01290	
..	..	..	..	..	..	Observations could not be made as the staff was engaged for letting out water there being heavy demand for it.
..	..	..	..	..	..	
..	..	..	..	..	..	No observations were taken as there was drizzling and the sky was cloudy.
..	..	..	..	..	..	
..	..	..	..	..	..	
..	..	..	0·016	0·003	0·007	
..	..	..	0·014	0·003	0·010	
..	..	..	0·013	0·002	0·007	
..	..	..	0·017	0·002	0·011	
..	..	..	0·019	0·001	0·013	
..	..	..	..	..	..	Observations could not be made as the tank was dry.
..	..	..	..	..	..	
..	..	..	0·043	0·0011	0·0059	
..	..	..	0·0427	0·0009	0·0064	
..	..	..	..	..	..	Observations not reliable there being rainfall.
..	..	..	..	..	..	Observations could not be made owing to rain.
..	..	..	0·015	0·0003	0·0147	
..	..	..	0·008	0·0003	0·0016	
..	..	..	..	..	..	Results unreliable.
..	..	..	0·018	0·0007	0·0027	0·0406 Discharge from outlet in canal for irrigation.
..	..	..	0·016	0·00057	0·0009	0·03778 Do.
..	..	..	0·0165	0·00147	0·02203	
..	..	..	0·016	0·00104	0·008	
..	..	..	0·3350	0·0008	0·0032	

STATEMENT

Name of tank.	Month and year.	Date.	No. of days.	Gauge readings at commencement.	Total loss.
1	2	3	4	5	6
				Feet.	Feet.
Hartala Tank ..	May 1926 ..				
	June 1926 ..	....	..	..	..
	July 1926 ..				
	August 1926 ..	....	..	..	..
	September 1926 ..	23rd to 28th	5	3·72	0·12
	October 1926 ..	21st to 25th	4	2·84	0·10
	November 1926 ..	23rd to 27th	4	1·90	0·10
	December 1926 ..	20th to 24th	4	1·14	0·09
	January 1927 ..	18th to 22nd	4	0·475	0·075
	February 1927 ..				
	March 1927 ..	....	..	..	..
	April 1927 ..				
Lake Whiting ..	May 1926 ..	30th April 1926 (6 p.m.) to 31st May 1926 (6 p.m.).	31	74·30	1·39
	June 1926 ..				
	July 1926 ..				
	August 1926 ..	.....	..	..	..
	September 1926 ..				
	October 1926 ..				
	November 1926 ..	31st October 1926 (6 p.m.) to 30th Nov. 1926 (6 p.m.)	30	131·20	0·55
	December 1926 ..	30th Nov. 1926 (6 p.m.) to 31st Dec. 1926 (6 p.m.).	31	123·90	0·76
	January 1927 ..	31st Dec. 1926 (6 p.m.) to 31st Jan. 1927 (6 p.m.).	31	116·45	0·88
	February 1927 ..	31st Jan. 1927 (6 p.m.) to 28th Feb. 1927 (6 p.m.).	28	110·50	0·81
	March 1927 ..	28th Feb. 1927 (6 p.m.) to 31st Mar. 1927 (6 p.m.).	31	105·05	1·09
	April 1927 ..	31st Mar. 1927 (6 p.m.) to 30th April 1927 (6 p.m.).	30	101·40	1·07
Mh iswad Tank ..	May 1926 ..				
	June 1926 ..				
	July 1926 ..	.....	..	..	..
	August 1926 ..				
	September 1926 ..				
	October 1926 ..	10th October 1926 (8 a.m.) to 11th November 1926 (8 a.m.).	32	22·20	1·04
	November 1926 ..				
	December 1926 ..	.....	..	..	..
	January 1927 ..	1st Jan. 1927 ..	31	15·30	1·445
	February 1927 ..				
	March 1927 ..	.....	...	..	..
	April 1927 ..				

IX—*concld.*

Average loss per day.	Date of rainfall.	Rainfall.	Replenishment.	Distribution of loss.			Remarks.
				Evaporation.	Leakage.	Percolation and absorption.	
7	8	9	10	11	12	13	14
Feet.		Inches.	Feet.	Feet.	Feet.	Feet.	
..	..	..	..	..	..	....	Observations could not be made as the tank was dry.
..	..	..	..	..	..	....	Observations could not be made owing to rain.
0·024	..	..	..	0·010	..	0·014	
0·025	..	..	..	0·010	..	0·015	
0·025	..	..	..	0·009	..	0·016	
0·0225	..	..	..	0·012	..	0·0105	
0·0187	..	..	..	0·0092	..	0·0095	
..	..	..	..	..	..	....	Observations could not be made as the tank was dry.
0·04484	..	..	..	0·03484	0·00020	0·00980	
..	..	..	..	..	..	....	No observations could be made as there was inflow to the tank.
0·01833	..	..	..	0·01500	0·00083	0·00250	
0·02452	..	..	..	0·02097	0·00071	0·00284	
0·02839	..	..	..	0·02581	0·00022	0·000236	
0·02893	..	..	..	0·02500	0·00023	0·00370	
0·03516	..	..	..	0·03000	0·00017	0·00499	
0·03567	..	..	..	0·03167	0·00010	0·00390	
..	..	..	..	..	..	....	
0·0325	10th Nov. 1926.	0·39	..	0·0100	..	0·0225	The observations were made when the water level in the tank was at its maximum and at about middepth.
..	..	..	..	..	..	....	
0·047	..	..	..	0·0100	0·0370	....	
..	..	..	..	..	..	....	

STATEMENT

Statement of Silt Observations made on some of the Rivers in the

Serial No.	Name of the River and site.	Date.	Station of the section.	Gauge reading.	Total depth of water at station.	
1	2	3	4	5	6	
				Ft.	Ft.	In.
1	Krishna at Mahuli Bridge.	7th July 1926 ..	Left Bank ..	..	3	0
		Do. ..	Centre ..	..	4	0
		Do. ..	Do. ..	..	4	0
		Do. ..	Do. ..	..	4	0
		Do. ..	Right Bank ..	..	2	0
2	Do. ..	9th August 1926 ..	Left Bank ..	..	4	0
		Do. ..	Centre ..	..	7	0
		Do. ..	Do. ..	..	7	0
		Do. ..	Do. ..	..	7	0
		Do. ..	Right Bank ..	..	6	0
3	Krishna at Kusnal ..	29th June 1926 ..	Left Bank ..	9·00	14	0
		Do. ..	Centre ..	9·00	15	0
		Do. ..	Do. ..	9·00	15	0
		Do. ..	Do. ..	9·00	15	0
		Do. ..	Right Bank ..	9·00	16	0
4	Do. ..	6th July 1926 ..	Left Bank ..	19·20	24	0
		Do. ..	Centre ..	19·20	25	0
		Do. ..	Do. ..	19·20	25	0
		Do. ..	Do. ..	19·20	25	0
		Do. ..	Right Bank ..	19·20	27	0
5	Do. ..	28th Aug. 1926 ..	Left Bank ..	28·50	33	0
		Do. ..	Centre ..	28·50	35	0
		Do. ..	Do. ..	28·50	35	0
		Do. ..	Do. ..	28·50	35	0
		Do. ..	Right Bank ..	28·50	25	0
6	Do. ..	14th Sept. 1926 ..	Left Bank ..	16·50	22	0
		Do. ..	Centre ..	16·50	23	0
		Do. ..	Do. ..	16·50	23	0
		Do. ..	Do. ..	16·50	23	0
		Do. ..	Right Bank ..	16·50	24	0

No. X.

Deccan Irrigation Circle, during the monsoon of the year 1926-27.

Depth from surface of silt specimen.	Surface velocity of the river at each station. Feet per second.	Weight of dry silt in 10 ozs. of water.	Remarks.
7	8	9	10
Ft. In.		Grains.	
1 6	6·00	4·84	Left Bank. Middepth specimen.
0 6	6·00	3·96	Centre. Top specimen.
2 0			Do. Middepth specimen.
3 0			Do. Bottom specimen.
1 0	6·00	5·10	Right Bank. Middepth specimen.
2 0	7·14	7·25	Left Bank. Middepth specimen.
0 6	7·57	7·00	Centre. Top specimen (Bottle broken in transit).
3 6			Do. Middepth specimen.
6 0			Do. Bottom specimen.
3 0	7·00	5·91	Right Bank. Middepth specimen.
7 0	2·22	24·29	Left Bank. Middepth specimen.
0 6	2·11	18·66	Centre. Top specimen.
7 6			Do. Middepth specimen.
14 0			Do. Bottom specimen.
8 0	2·00	18·72	Right Bank. Middepth specimen.
12 0	5·00	2·18	Left Bank. Middepth specimen.
0 6	6·66	2·45	Centre. Top specimen.
12 6			Do. Middepth specimen.
24 0			Do. Bottom specimen.
13 6	5·71	1·84	Right Bank. Middepth specimen.
16 6	5·00	1·20	Left Bank. Middepth specimen.
0 6	5·71	2·00	Centre. Top specimen.
17 6			Do. Middepth specimen.
34 0			Do. Bottom specimen.
12 6	5·26	2·23	Right Bank. Middepth specimen.
11 0	2·86	14·08	Left Bank. Middepth specimen.
0 6	3·33	21·03	Centre. Top specimen.
11 6			Do. Middepth specimen.
22 0			Do. Bottom specimen.
12 0	3·08	27·79	Right Bank. Middepth specimen.

STATEMENT

Serial No.	Name of the River and site.	Date.	Station of the section.	Gauge reading.	Total depth of water at station.
1	2	3	4	5	6
				Ft.	Ft. in.
7	Krishna at Kusnal ..	18th Sept. 1926 ..	Left Bank ..	26·60	31 0
		Do. ..	Centre ..	26·60	32 0
		Do. ..	Do. ..	26·60	32 0
		Do. ..	Do. ..	26·60	32 0
		Do. ..	Right Bank ..	26·60	20 0
8	Nira at M. & S. M. Railway bridge.	9th August 1926 ..	Left Bank ..	..	9 0
		Do. ..	Centre ..	..	7 0
		Do. ..	Do. ..	..	7 0
		Do. ..	Do. ..	..	7 0
		Do. ..	Right Bank ..	..	10 0
9	Do. ..	4th December 1926..	Left Bank ..	..	3 0
		Do. ..	Centre ..	..	2 6
		Do. ..	Do. ..	..	2 6
		Do. ..	Do. ..	..	2 6
		Do. ..	Right Bank ..	..	3 4
10	Nira at Shirwal ..	31st July 1926 ..	Left Bank ..	..	2 0
		Do. ..	Centre ..	..	4 0
		Do. ..	Do. ..	..	4 0
		Do. ..	Do. ..	..	4 0
		Do. ..	Right Bank ..	..	2 0
11	Do. ..	7th August 1926 ..	Left Bank ..	..	4 6
		Do. ..	Centre ..	..	9 0
		Do. ..	Do. ..	..	9 0
		Do. ..	Do. ..	..	9 0
		Do. ..	Right Bank ..	..	7 0
12	Bhima at Pargaon ..	20th June 1926 ..	Left Bank ..	..	8 0
		Do. ..	Centre ..	..	12 0
		Do. ..	Do. ..	..	12 0
		Do. ..	Do. ..	..	12 0
		Do. ..	Right Bank ..	..	8 6
13	Do. ..	7th July 1926 ..	Left Bank ..	..	9 5
		Do. ..	Centre ..	..	21 9
		Do. ..	Do. ..	..	21 9
		Do. ..	Do. ..	..	21 9
		Do. ..	Right Bank ..	..	11 6

No. X—*contd.*

Depth from surface of silt specimen.		Surface velocity of the river at each station. Feet per second.	Weight of dry silt in 10 ozs. of water.	Remarks.
7		8	9	10
Ft.	in.		Grains.	
15	6	5·00	8·17	Left Bank. Middepth specimen.
0	6	6·25	9·85	Centre. Top specimen.
30	0			Do. Middepth specimen.
31	0			Do. Bottom specimen.
10	0	5·74	9·94	Right Bank. Middepth specimen.
4	6	4·3	11·69	Left Bank. Middepth specimen.
0	6	4·3	8·78	Centre. Top specimen.
3	6			Do. Middepth specimen.
6	0			Do. Bottom specimen.
5	0	4·3	10·05	Right Bank. Middepth specimen.
1	6	0·48	0·83	Left Bank. Middepth specimen.
0	6	0·48	3·44	Centre. Top specimen.
1	3			Do. Middepth specimen.
1	6			Do. Bottom specimen.
1	8	0·48	...	Right Bank. Middepth specimen. (Bottle broken in transit.)
1	0	3·73	3·44	Left Bank. Middepth specimen.
0	6	4·05	1·24	Centre. Top specimen.
2	0			Do. Middepth specimen.
3	0			Do. Bottom specimen.
1	0	3·33	1·47	Right Bank. Middepth specimen.
2	0	3·87	10·53	Left Bank. Middepth specimen.
0	6	4·55	3·31	Centre. Top specimen.
4	6			Centre. Middepth specimen.
8	0			Centre. Bottom specimen.
3	6	3·45	2·61	Right Bank. Middepth specimen.
3	0	2·22	37·36	Left Bank. Middepth specimen.
0	6	2·22	40·02	Centre. Top specimen.
6	0			Do. Middepth specimen.
11	0			Do. Bottom specimen.
4	3	2·22	17·08	Right Bank. Middepth specimen.
4	8½	2·22	18·05	Left Bank. Middepth specimen.
0	0	2·22	22·85	Centre. Top specimen.
10	10			Do. Middepth specimen.
20	9			Do. Bottom specimen.
5	9	2·22	15·68	Right Bank. Middepth specimen.

STATEMENT

Serial No.	Name of the River and site.	Date.	Station of the section.	Gauge reading.	Total depth of water at station.
1	2	3	4	5	6
				Ft.	Ft. in.
14	Bhima at Pargaon ..	8th July 1926 ..	Left Bank ..	..	9 6
		Do. ..	Centre ..	..	23 6
		Do. ..	Do. ..	..	23 6
		Do. ..	Do. ..	..	23 6
		Do. ..	Right Bank	..	12 0
15	Do. ..	13th July 1926 ..	Left Bank ..	..	4 0
		Do. ..	Centre ..	..	6 0
		Do. ..	Do. ..	..	6 0
		Do. ..	Do. ..	..	6 0
		Do. ..	Right Bank ..	..	4 0
16	Do. ..	26th July 1926 ..	Left Bank ..	..	12 6
		Do. ..	Centre ..	..	30 3
		Do. ..	Do. ..	..	30 3
		Do. ..	Do. ..	..	30 3
		Do. ..	Right Bank ..	..	14 6
17	Do. ..	27th July 1926 ..	Left Bank ..	..	14 3
		Do. ..	Centre ..	..	34 0
		Do. ..	Do. ..	..	34 0
		Do. ..	Do. ..	..	34 0
		Do. ..	Right Bank ..	..	15 6
18	Do. ..	28th September 1926.	Left Bank ..	..	5 0
		Do. ..	Centre ..	..	6 6
		Do. ..	Do. ..	..	6 6
		Do. ..	Do. ..	..	6 6
		Do. ..	Right Bank ..	..	4 6
19	Do. ..	3rd October 1926 ..	Left Bank ..	..	5 0
		Do. ..	Centre ..	..	7 0
		Do. ..	Do. ..	..	7 0
		Do. ..	Do. ..	..	7 0
		Do. ..	Right Bank ..	..	4 6
20	Bhima at Koregaon.	28th June 1926 ..	Left Bank ..	..	7 6
		Do. ..	Centre ..	..	10 0
		Do. ..	Do. ..	..	10 0
		Do. ..	Do. ..	..	10 0
		Do. ..	Right Bank ..	..	6 0

No. X—*contd.*

Depth from surface of silt specimen.		Surface velocity of the river at each station. Feet per second.	Weight of dry silt in 10 ozs. of water.	Remarks.
7		8	9	10
Ft.	In.		Grains.	
4	0	2·5	24·92	Left Bank. Middepth specimen.
0	6	2·5	19·90	Centre. Top specimen.
11	9			Do. Middepth specimen.
22	6			Do. Bottom specimen.
6	0	2·5	41·05	Right Bank. Middepth specimen.
2	0	3·33	10·49	Left Bank. Middepth specimen.
0	6	4·00	14·31	Centre. Top specimen.
3	0			Do. Middepth specimen.
5	0			Do. Bottom specimen.
2	0	2·73	2·08	Right Bank. Middepth specimen.
0	3	4·08	8·12	Left Bank. Middepth specimen.
0	6	4·76	4·48	Centre. Top specimen.
15	1½			Do. Middepth specimen.
29	3			Do. Bottom specimen.
7	3	4·00	4·53	Right Bank. Middepth specimen.
7	1½	4·54	1·84	Left Bank. Middepth specimen.
0	6	4·87	44·32	Centre. Top specimen.
17	0			Do. Middepth specimen.
33	0			Do. Bottom specimen.
7	9	4·08	15·53	Right Bank. Middepth specimen.
2	6	2·85	..	Left Bank. Middepth specimen. (Bottle broken in transit.
0	6	3·22	11·72	Centre. Top specimen.
3	3			Do. Middepth specimen.
5	6			Do. Bottom specimen
2	3	2·77	8·65	Right Bank. Middepth specimen.
2	6	4·65	15·24	Left Bank. Middepth specimen.
0	6	5·00	12·73	Centre. Top specimen.
3	6			Do. Middepth specimen.
6	0			Do. Bottom specimen.
2	3	4·76	17·17	Right Bank. Middepth specimen.
3	9	1·00	30·55	Left Bank. Middepth specimen.
0	6	2·00	24·23	Centre. Top specimen.
5	0			Do. Middepth specimen.
9	0			Do. Bottom specimen.
3	0	2·00	30·31	Right Bank. Middepth specimen.

STATEMENT

Serial No.	Name of the River and site.	Date.	Station of the section.	Gauge reading.	Total depth of water at station.
1	2	3	4	5	6
				Ft. i	Ft. in.
21	Bhima at Koregaon.	7th July 1926 ..	Left Bank ..	..	12 0
		Do. ..	Centre ..	..	14 10
		Do. ..	Do. ..	..	14 10
		Do. ..	Do. ..	..	14 10
		Do. ..	Right Bank ..	..	6 6
22	Do. ..	25th July 1926 ..	Left Bank ..	..	10 4
		Do. ..	Centre ..	..	11 2
		Do. ..	Do. ..	..	11 2
		Do. ..	Do. ..	..	11 2
		Do. ..	Right Bank ..	..	9 6
23	Do. ..	26th July 1926 ..	Left Bank ..	..	17 0
		Do. ..	Centre ..	..	17 6
		Do. ..	Do. ..	..	17 6
		Do. ..	Do. ..	..	17 6
		Do. ..	Right Bank ..	..	8 0
24	Do. ..	2nd Aug. 1926 ..	Left Bank ..	..	9 6
		Do. ..	Centre ..	..	10 8
		Do. ..	Do. ..	..	10 8
		Do. ..	Do. ..	..	10 8
		Do. ..	Right Bank ..	..	8 4
25	Do. ..	7th Aug. 1926 ..	Left Bank ..	..	11 5
		Do. ..	Centre ..	..	10 8
		Do. ..	Do. ..	..	10 8
		Do. ..	Do. ..	..	10 8
		Do. ..	Right Bank ..	..	9 2
26	Do. ..	16th Aug. 1926 ..	Left Bank ..	..	16 0
		Do. ..	Centre ..	..	21 8
		Do. ..	Do. ..	..	21 8
		Do. ..	Do. ..	..	21 8
		Do. ..	Right Bank ..	..	14 11
27	Do. ..	28th Aug. 1926 ..	Left Bank ..	..	10 0
		Do. ..	Centre ..	..	9 2
		Do. ..	Do. ..	..	9 2
		Do. ..	Do. ..	..	9 2
		Do. ..	Right Bank ..	..	8 0

No. X—*contd.*

Depth from surface of silt specimen.		Surface velocity of the river at each station. Feet per second.	Weight of dry silt in 10 ozs. of water.	Remarks.
7		8	9	10
Ft.	in.		Grains.	
0	0	5·00	9·26	Left Bank. Middepth specimen.
0	6	5·05	23·96	Centre. Top specimen.
7	5			Do. Middepth specimen.
13	10			Do. Bottom specimen.
3	3	2·00	11·41	Right Bank. Middepth specimen.
5	2	4·00	7·51	Left Bank. Middepth specimen.
0	6	4·00	1·67	Centre. Top specimen.
5	7			Do. Middepth specimen.
10	2			Do. Bottom specimen.
4	0	4·00	10·82	Right Bank. Middepth specimen.
8	6	5·00	14·45	Left Bank. Middepth specimen.
0	6	4·00	13·28	Centre. Top specimen.
8	9			Do. Middepth specimen.
16	0			Do. Bottom specimen.
4	0	4·00	5·80	Right Bank. Middepth specimen.
4	9	4·00	12·31	Left Bank. Middepth specimen.
0	6	4·00	10·13	Centre. Top specimen.
5	4			Do. Middepth specimen.
9	8			Do. Bottom specimen.
4	2	3·00	7·27	Right Bank. Middepth specimen.
5	8½	4·00	2·54	Left Bank. Middepth specimen.
0	6	3·5	23·96	Centre. Top specimen.
5	4			Do. Middepth specimen.
9	8			Do. Bottom specimen.
4	7	3·00	1·03	Right Bank. Middepth specimen.
8	0	4·00	77·99	Left Bank. Middepth specimen.
0	6	4·00	11·29	Centre. Top specimen.
10	10			Do. Middepth specimen.
20	8			Do. Bottom specimen.
7	5½	3·5	1·45	Right Bank. Middepth specimen.
5	0	4·00	20·78	Left Bank. Middepth specimen.
0	6	4·00	2·29	Centre. Top specimen.
4	7			Do. Middepth specimen.
8	2			Do. Bottom specimen.
4	0	3·50	0·48	Right Bank. Middepth specimen.

STATEMENT

Serial No.	Name of the River and site.	Date.	Station of the section.	Gauge reading.	Total depth of water at station.
1	2	3	4	5	6
				Ft.	Ft. in.
28	Bhima at Koregaon..	2nd Sept. 1926 ..	Left Bank ..	..	12 0
		Do. ..	Centre ..	..	16 0
		Do. ..	Do. ..	..	16 0
		Do. ..	Do. ..	..	16 0
		Do. ..	Right Bank ..	..	8 2
29	Do. ..	15th Sept. 1926 ..	Left Bank ..	..	11 4
		Do. ..	Centre ..	..	16 4
		Do. ..	Do. ..	..	16 4
		Do. ..	Do. ..	..	16 4
		Do. ..	Right Bank ..	..	9 2
30	Ghod at Kalamb ..	27th June 1926 ..	Left Bank ..	..	4 0
		Do. ..	Centre ..	..	4 0
		Do. ..	Do. ..	..	4 0
		Do. ..	Do. ..	..	4 0
		Do. ..	Right Bank ..	..	3 0
31	Do. ..	28th June 1926 ..	Left Bank ..	..	6 0
		Do. ..	Centre ..	..	6 0
		Do. ..	Do. ..	..	6 0
		Do. ..	Do. ..	..	6 0
		Do. ..	Right Bank ..	..	4 6
32	Do. ..	29th June 1926 ..	Left Bank ..	..	6 0
		Do. ..	Centre ..	..	6 0
		Do. ..	Do. ..	..	6 0
		Do.	Do. ..	..	6 0
		Do. ..	Right Bank ..	..	4 6
33	Do. ..	5th July 1926 ..	Left Bank ..	..	8 0
		Do. ..	Centre ..	..	8 0
		Do. ..	Do. ..	..	8 0
		Do. ..	Do. ..	..	8 0
		Do. ..	Right Bank ..	..	6 0
34	Do. ..	6th July 1926 ..	Left Bank ..	..	12 0
		Do. ..	Centre ..	..	12 0
		Do. ..	Do. ..	..	12 0
		Do.	Do. ..	..	12 0
		Do. ..	Right Bank ..	..	8 6

No. X—*contd.*

Depth from surface of silt specimen.		Surface velocity of the river at each station. Feet per second.	Weight of dry silt in 10 ozs. of water.	Remarks.
7		8	9	10
Ft.	in.		Grains.	
6	0	4·00	37·87	Left Bank. Middepth specimen.
0	6	3·75	6·10	Centre. Top specimen.
8	0			Do. Middepth specimen.
15	0			Do. Bottom specimen.
4	1	3·00	1·71	Right Bank. Middepth specimen.
5	8	4·00	1·97	Left Bank. Middepth specimen.
0	0	3·75	6·52	Centre. Top specimen.
8	2			Do. Middepth specimen.
15	4			Do. Bottom specimen.
4	7	2·00	5·01	Right Bank. Middepth specimen.
2	0	3·75	3·00	Left Bank. Middepth specimen.
0	6	3·75	2·17	Centre. Top specimen.
2	0			Do. Middepth specimen.
3	0			Do. Bottom specimen.
1	6	3·00	2·37	Right Bank. Middepth specimen.
3	0	4·5	11·26	Left Bank. Middepth specimen.
0	6	4·5	13·28	Centre. Top specimen.
3	0			Do. Middepth specimen.
5	0			Do. Bottom specimen.
2	3	3·75	22·23	Right Bank. Middepth specimen.
3	0	4·5	13·74	Left Bank. Middepth specimen.
0	6	4·5	12·07	Centre. Top specimen.
3	0			Do. Middepth specimen. (Bottle broken in transit.)
5	0			Do. Bottom specimen.
2	3	3·75	10·40	Right Bank. Middepth specimen.
4	0	5·00	13·89	Left Bank. Middepth specimen.
0	6	5·00	13·91	Centre. Top specimen.
4	0			Do. Middepth specimen.
7	0			Do. Bottom specimen.
3	0	4·5	13·16	Right Bank. Middepth specimen.
6	0	7·00	1·12	Left Bank. Middepth specimen.
0	6	7·00	15·40	Centre. Top specimen.
6	0			Do. Middepth specimen.
11	0			Do. Bottom specimen.
4	3	5·5	11·74	Right Bank. Middepth specimen.

STATEMENT

Serial No.	Name of the River and site.	Date.	Station of the section.	Gauge reading.	Total depth of water at station.
1	2	3	4	5	6
				Ft.	Ft. in.
35	Ghod at Kalamb ..	9th July 1926 ..	Left Bank ..	..	11 0
		Do. ..	Centre ..	..	11 0
		Do. ..	Do. ..	..	11 0
		Do. ..	Do. ..	..	11 0
		Do. ..	Right Bank ..	..	8 0
36	Do. ..	13th July 1926 ..	Left Bank ..	..	18 6
		Do. ..	Centre ..	..	12 0
		Do. ..	Do. ..	..	12 0
		Do. ..	Do. ..	..	12 0
		Do. ..	Right Bank ..	..	9 0
37	Do. ..	23rd July 1926 ..	Left Bank ..	..	5 6
		Do. ..	Centre ..	..	7 6
		Do. ..	Do. ..	..	7 6
		Do. ..	Do. ..	..	7 6
		Do. ..	Right Bank ..	..	6 6
38	Do. ..	25th July 1926 ..	Left Bank ..	..	10 6
		Do. ..	Centre ..	..	14 0
		Do. ..	Do. ..	..	14 0
		Do. ..	Do. ..	..	14 0
		Do. ..	Right Bank ..	..	11 0
39	Do. ..	26th July 1926 ..	Left Bank ..	..	10 0
		Do. ..	Centre ..	..	14 0
		Do. ..	Do. ..	..	14 0
		Do. ..	Do. ..	..	14 0
		Do. ..	Right Bank ..	..	11 0
40	Do. ..	2nd Aug. 1926 ..	Left Bank ..	..	8 6
		Do. ..	Centre ..	..	12 0
		Do. ..	Do. ..	..	12 0
		Do. ..	Do. ..	..	12 0
		Do. ..	Right Bank ..	..	9 0
41	Do. ..	9th Aug. 1926 ..	Left Bank ..	..	11 0
		Do. ..	Centre ..	..	14 0
		Do. ..	Do. ..	..	14 0
		Do. ..	Do. ..	..	14 0
		Do. ..	Right Bank ..	..	11 6

No. X—*contd.*

Depth from surface of silt specimen.		Surface velocity of the river at each station. Feet per second.	Weight of dry silt in 10 ozs. of water.	Remarks.
7		8	9	10
Ft.	in.		Grains.	
5	6	6·4	3·44	Left Bank. Middepth specimen.
0	6	6·4	3·38	Centre. Top specimen.
5	6			Do. Middepth specimen.
10	0			Do. Bottom specimen.
4	0	5·4	1·09	Right Bank. Middepth specimen.
4	3	5·5	3·70	Left Bank. Middepth specimen.
0	6	7·00	1·47	Centre. Top specimen.
6	0			Do. Middepth specimen.
11	0			Do. Bottom specimen.
4	6	5·5	3·22	Right Bank. Middepth specimen.
2	9	4·5	0·96	Left Bank. Middepth specimen.
0	6	5·5	0·34	Centre. Top specimen.
3	9			Do. Middepth specimen.
6	6			Do. Bottom specimen.
3	3	4·5	2·89	Right Bank. Middepth specimen.
5	3	6·1	0·79	Left Bank. Middepth specimen.
0	6	7·5	3·91	Centre. Top specimen.
7	0			Do. Middepth specimen.
13	0			Do. Bottom specimen.
5	6	6·1	1·49	Right Bank. Middepth specimen.
5	0	6·4	3·28	Left Bank. Middepth specimen.
0	6	7·5	11·79	Centre. Top specimen.
7	0			Do. Middepth specimen.
13	0			Do. Bottom specimen.
5	6	6·1	40·51	Right Bank. Middepth specimen.
4	3	5·6	19·23	Left Bank. Middepth specimen.
0	6	7·00	18·96	Centre. Top specimen.
6	0			Do. Middepth specimen.
11	0			Do. Bottom specimen.
4	6	5·6	5·54	Right Bank. Middepth specimen.
5	6	6·1	8·43	Left Bank. Middepth specimen.
0	6	7·5	2·93	Centre. Top specimen.
7	0			Do. Middepth specimen.
13	0			Do. Bottom specimen.
5	9	6·1	2·69	Right Bank. Middepth specimen.

STATEMENT

Serial No.	Name of the River and site.	Date.	Station of the section.	Gauge reading.	Total depth of water at station.	
1	2	3	4	5	6	
				Ft.	Ft.	in.
42	Ghod at Kalamb ..	10th Aug. 1926 ..	Left Bank ..	..	13	6
		Do. ..	Centre ..	..	18	0
		Do. ..	Do. ..	..	18	0
		Do. ..	Do. ..	..	18	0
		Do. ..	Right Bank ..	..	14	6
43	Do. ..	16th August 1926 ..	Left Bank ..	..	13	6
		Do. ..	Centre ..	..	18	0
		Do. ..	Do. ..	..	18	0
		Do. ..	Do. ..	..	18	0
		Do. ..	Right Bank ..	..	14	6
44	Do. ..	26th August 1926 ..	Left Bank ..	..	8	6
		Do. ..	Centre ..	..	12	0
		Do. ..	Do. ..	..	12	0
		Do. ..	Do. ..	..	12	0
		Do. ..	Right Bank ..	..	9	0
45	Mula at Rahuri ..	10th August 1926 ..	Left Bank ..	10·75	9	6
		Do. ..	Centre ..	10·75	8	6
		Do. ..	Do. ..	10·75	8	6
		Do. ..	Do. ..	10·75	8	6
		Do. ..	Right Bank ..	10·75	5	4
46	Do. ..	31st August 1926 ..	Left Bank ..	8·75	11	0
		Do. ..	Centre ..	8·75	8	0
		Do. ..	Do. ..	8·75	8	0
		Do. ..	Do. ..	8·75	8	0
		Do. ..	Right Bank ..	8·75	7	0
47	Mula at Ambeghargaon.	6th July 1926 ..	Left Bank ..	..	4	0
		Do. ..	Centre ..	..	11	0
		Do. ..	Do. ..	..	11	0
		Do. ..	Do. ..	..	11	0
		Do. ..	Right Bank ..	..	2	0
48	Do. ..	9th July 1926 ..	Left Bank ..	..	7	0
		Do. ..	Centre ..	..	9	0
		Do. ..	Do. ..	..	9	6
		Do. ..	Do. ..	..	9	0
		Do. ..	Right Bank ..	..	3	6

No. X—*contd.*

Depth from surface of silt specimen.		Surface velocity of the river at each station: Feet per second.	Weight of dry silt in 10 ozs. of water.	Remarks.
7		8	9	10
Ft.	ins		Grains.	
6	9	8·00	1·20	Left Bank. Middepth specimen.
0	6	9·00	7·25	Centre. Top specimen.
9	0			Do. Middepth specimen.
17	0			Do. Bottom specimen.
7	3	8·00	1·20	Right Bank. Middepth specimen.
6	9	8·00	4·88	Left Bank. Middepth specimen.
0	6	9·00	5·58	Centre. Top specimen.
9	0			Do. Middepth specimen.
17	0			Do. Bottom specimen.
7	3	8·00	10·67	Right Bank. Middepth specimen.
4	3	5·5	0·77	Left Bank. Middepth specimen.
0	6	7·00	11·55	Centre. Top specimen.
6	0			Do. Middepth specimen.
11	0			Do. Bottom specimen.
4	6	5·5	0·66	Right Bank. Middepth specimen.
4	9	5·00	7·08	Left Bank. Middepth specimen.
0	6	5·71	6·30	Centre. Top specimen.
4	3			Do. Middepth specimen.
7	6			Do. Bottom specimen.
2	8	5·00	4·53	Right Bank. Middepth specimen.
5	0	5·00	1·38	Left Bank. Middepth specimen.
0	6	5·26	1·35	Centre. Top specimen.
4	0			Do. Middepth specimen.
7	0			Do. Bottom specimen.
3	6	5·13	0·08	Right Bank. Middepth specimen.
2	0	6·25	5·15	Left Bank. Middepth specimen.
0	6	6·25	7·66	Centre. Top specimen.
5	6			Do. Middepth specimen.
10	0			Do. Bottom specimen.
1	0	6·25	6·57	Right Bank. Middepth specimen.
3	6	5·71	2·32	Left Bank. Middepth specimen.
0	6	5·71	8·50	Centre. Top specimen.
4	6			Do. Middepth specimen.
8	0			Do. Bottom specimen.
1	6	5·71	1·91	Right Bank. Middepth specimen.

STATEMENT

Serial No.	Name of the River and site.	Date.	Station of the section.	Gauge reading.	Total depth of water at station.
1	2	3	4	5	6
				Ft.	Ft. In.
49	Mula at Ambeghar-gaon.	14th July 1926 ..	Left Bank ..	..	7 0
		Do. ..	Centre ..	..	6 0
		Do. ..	Do. ..	..	6 0
		Do. ..	Do. ..	..	6 0
		Do. ..	Right Bank ..	..	2 0
50	Do. ..	7th August 1926 ..	Left Bank ..	..	11 0
		Do. ..	Centre ..	..	10 0
		Do. ..	Do. ..	..	10 6
		Do. ..	Do. ..	..	10 0
		Do. ..	Right Bank ..	..	3 0
51	Do. ..	15th Aug. 1926 ..	Left Bank ..	..	12 0
		Do. ..	Centre ..	..	11 0
		Do. ..	Do. ..	..	11 0
		Do. ..	Do. ..	..	11 0
		Do. ..	Right Bank ..	..	2 0
52	Do. ..	31st August 1926 ..	Left Bank ..	..	8 0
		Do. ..	Centre ..	..	7 0
		Do. ..	Do. ..	..	7 0
		Do. ..	Do ..		7 0
		Do. ..	Right Bank		2 0
53	Do. ..	5th July 1926 ..	Left Bank	..	2 6
		Do. ..	Centre	..	3 0
		Do. ..	Do.	..	3 0
		Do. ..	Do.	..	....
		Do. ..	Right Bank ..	..	5 0
54	Do. ..	26th July 1926 ..	Left Bank	..	2 0
		Do. ..	Centre	..	5 0
		Do. ..	Do. ..	..	5 0
		Do. ..	Do. ..	..	5 0
		Do. ..	Right Bank ..	..	3 6
55	Do. ..	10th August 1926 ..	Left Bank ..	..	13 0
		Do. ..	Centre ..	..	11 0
		Do. ..	Do. ..	..	11 0
		Do. ..	Do. ..	..	....
		Do. ..	Right Bank ..	..	4 0

No. X—*contd.*

Depth from surface of silt specimen. 7	Surface velocity of the river at each station. Feet per second. 8	Weight of dry silt in 10 ozs. of water. 9	Remarks. 10
Ft. in.		Grains.	
3 6	5·88	1·05	Left Bank. Middepth specimen.
0 6	5·88	1·75	Centre. Top specimen.
3 0			Do. Middepth specimen.
5 0			Do. Bottom specimen.
1 0	5·88	1·40	Right Bank. Middepth specimen.
5 6	6·67	1·49	Left Bank. Middepth specimen.
0 6	6·67	1·02	Centre. Top specimen.
5 0			Do. Middepth specimen.
0 0			Do. Bottom specimen.
1 6	6·67	1·71	Right Bank. Middepth specimen.
6 0	6·67	1·07	Left Bank. Middepth specimen.
0 6	6·67	2·24	Centre. Top specimen.
5 6			Do. Middepth specimen.
10 0			Do. Bottom specimen.
1 0	6·07	0·44	Right Bank. Middepth specimen.
4 0	5·71	1·40	Left Bank. Middepth specimen.
0 6	5·71	1·88	Centre. Top specimen.
3 6			Do. Middepth specimen.
6 0			Do. Bottom specimen.
1 0	5·71	1·25	Right Bank. Middepth specimen.
1 3	5·88	17·28	Left Bank. Middepth specimen.
0 6	5·88	18·27	Centre. Top specimen.
1 6			Do. Middepth specimen.
....			Do. Bottom specimen. (Bottle broken in transit).
2 6	5·88	15·72	Right Bank. Middepth specimen.
1 0	5·71	2·63	Left Bank. Middepth specimen.
0 6	5·71	0·87	Centre. Top specimen.
2 6			Do. Middepth specimen.
4 0			Do. Bottom specimen. (Bottle broken in transit).
1 9	5·71	2·76	Right Bank. Middepth specimen.
6 6	6·25	2·30	Left Bank. Middepth specimen.
0 6	6·25	10·40	Centre. Top specimen.
5 6			Do. Middepth specimen.
....			Do. Bottom specimen. (Bottle broken in transit).
2 0	6·25	2·23	Right Bank. Middepth specimen.

STATEMENT

Serial No.	Name of the River and site.	Date.	Station of the section.	Gauge reading.	Total depth of water at station.
1	2	3	4	5	6
				Ft.	Ft. in.
56	Kukari at Pimpalwadi.	25th July 1926 ..	Left Bank ..	.9	7 6
		Do. ..	Centre ..	..	8 0
		Do. ..	Do. ..	..	8 0
		Do. ..	Do. ..	..	8 0
		Do. ..	Right Bank ..	..	6 8
57	Do. ..	9th August 1926 ..	Left Bank ..	..	7 6
		Do. ..	Centre ..	..	7 6
		Do. ..	Do. ..	..	7 6
		Do. ..	Do. ..	..	7 6
		Do. ..	Right Bank ..	..	6 0
58	Do. ..	10th August 1926 ..	Left Bank ..	..	14 0
		Do. ..	Centre ..	..	15 0
		Do. ..	Do. ..	..	15 0
		Do. ..	Do. ..	..	15 0
		Do. ..	Right Bank ..	..	10 0
59	Do. .	16th August 1926. ..	Left Bank ..	..	13 6
		Do. ..	Centre ..	..	15 0
		Do. ..	Do. ..	..	15 0
		Do. ..	Do. ..	..	15 0
		Do. ..	Right Bank ..	..	9 8
60	Do. ..	1st September 1926 .	Left Bank ..	..	10 0
		Do. ..	Centre ..	..	10 6
		Do. ..	Do. ..	..	10 6
		Do. ..	Do. ..	..	10 6
		Do. ..	Right Bank ..	..	5 0

Note.—The figure of weight of dry silt given in column 9 for the centre one bottle out of these is broken the average worked out is for the

No. X—*concld.*

Depth from surface of silt specimen.		Surface velocity of the river at each station. Feet per second.	Weight of dry silt in 10 ozs. of water.	Remarks.
7		8	9	10
Ft.	in.		Grains.	
3	9	4·70	16·38	Left Bank. Middepth specimen.
0	0	5·0	28·37	Centre. Top specimen.
4	0			Do. Middepth specimen.
7	0			Do. Bottom specimen.
3	4	4·4	10·62	Right Bank. Middepth specimen.
3	9	4·9	6·31	Left Bank. Middepth specimen.
0	6	5·00	10·98	Centre. Top specimen.
3	9			Do. Middepth specimen.
6	6			Do. Bottom specimen.
3	0	4·4	33·55	Right Bank. Middepth specimen.
7	0	5·7	7·01	Left Bank. Middepth specimen.
0	6	5·8	15·06	Centre. Top specimen.
7	6			Do. Middepth specimen.
14	0			Do. Bottom specimen.
5	0	5·00	23·96	Right Bank. Middepth specimen.
6	9	5·8	6·85	Left Bank. Middepth specimen.
0	0	6·00	4·53	Centre. Top specimen. (Bottle broken in transit).
7	6			Do. Middepth specimen.
14	0			Do. Bottom specimen.
4	10	5·00	3·55	Right Bank. Middepth specimen.
5	0	5·2	1·97	Left Bank. Middepth specimen.
0	6	5·00	7·09	Centre. Top specimen.
5	3			Do. Middepth specimen.
9	6			Do. Bottom specimen.
2	6	4·6	5·78	Right Bank. Middepth specimen.

station is the average of the three samples trapped at top, middepth and bottom, except where remaining two.

ADDENDA TO THE REPORT

(1) ABSTRACT SHOWING THE DISCHARGES OF THE GHATA-PRABHA RIVER AT THE DHUPDAL WEIR (GOKAK CANAL)

(2) STATEMENT SHOWING DISCHARGES OVER THE WEIR AT VIR FROM THE YEAR 1907

FOR

NIRA RIGHT BANK CANAL

(Project No. 11, and item No. 50 of Statement V)

Abstract showing the discharges of the

Months.	1907-1908.	1908-1909.
April	2,219	2,171
May	2,282	2,008
June	53,331	33,422
July	432,356	1,042,713
August	1,051,461	617,575
September	160,013	76,842
October	50,871	16,280
November	8,453	5,291
December	3,861	3,101
January	2,681	2,824
February	2,358	2,213
March	2,252	2,156
April	....	....
Total of the daily rates of discharge in cubic feet per second ..	1,781,138	1,806,596
Total quantity discharged in million cubic feet=above line ×86,400	153,890	156,090
Add—Contents of the tank on 1st April following of every year up to 1921-22 and on 1st May of 1923 and of every subsequent year respectively	536	379
Total million cubic feet	154,426	156,469
Deduct—Contents of the tank on 31st March of every previous year up to 1921-22 and on 30th April 1922, and on 1st May of 1923 and of every sub equent year respectively ..	513	536
Grand Total, million cubic feet	153,913	155,933

Note.—Figures for the years 1888-89 to 1906-1907 are also available.

Ghataprabha river at the Dhupdal weir (Gokak Canal).

1909-1910.	1910-1911.	1911-1912.	1912-1913.	1913-1914.	1914-1915.	1915-1916.
1,329	2,153	1,979	2,360	2,071	854	1,912
679	812	1,852	4,803	1,825	1,969	2,127
68,389	120,190	158,591	67,304	172,064	33,313	151,225
881,409	311,802	283,423	1,187,584	441,057	1,233,993	491,147
187,352	582,540	367,883	583,619	369,585	877,896	381,020
56,945	108,511	116,217	97,226	62,751	283,032	154,507
36,999	111,524	24,453	39,925	28,210	47,021	98,219
3,601	11,752	5,489	3,876	3,913	17,586	17,017
2,912	9,777	4,370	3,806	2,868	9,435	5,890
2,523	2,450	2,802	2,953	2,603	2,936	3,521
2,342	1,995	2,104	2,304	1,193	2,075	2,270
2,157	1,979	2,023	2,084	999	1,861	1,861
....	....	....	....	....	....	....
1,247,227	1,265,464	976,186	1,997,900	1,080,139	2,511,971	1,310,716
107,760	109,336	84,342	172,626	93,324	217,034	113,246
379	516	576	497	143	705	724
108,139	109,852	84,918	173,123	93,467	217,739	113,970
389	585	373	373	509	148	718
107,750	109,267	84,545	172,750	92,958	217,591	113,252

The total of the daily rates of discharge in cusecs for April 1922 was 2,090.

Abstract showing the discharges of the

Months.	1916-1917.	1917-1918.	1918-1919.
April	1,788	2,158	2,250
May	14,329	2,319	4,215
June	251,343	196,506	56,887
July	197,246	337,326	154,241
August	652,427	261,394	384,056
September	155,439	352,625	73,862
October	57,395	179,350	17,175
November	189,203	43,473	9,813
December	16,081	11,244	3,620
January	8,614	7,425	2,875
February	3,708	2,356	2,058
March	2,231	2,116	1,592
April	....	....	....
Total of the daily rates of discharge in cubic feet per second ..	1,550,704	1,378,292	712,644
Total quantity discharged in million cubic feet=above line ×86,400	133,981	119,084	61,572
Add—Contents of the tank on 1st April following of every year up to 1921-22 and on 1st May of 1923 and of every subsequent year respectively	1,001	967	298
Total million cubic feet	134,982	120,051	61,870
Deduct—Contents of the tank on 31st March of every previous year up to 1921-22, on 30th April 1922, and on 1st May of 1923 and of every subsequent year respectively ..	736	1,008	974
Grand Total, million cubic feet	134,246	119,043	60,896

Ghataprabha river at the Dhupdal weir (Gokak Canal)—concld.

1919-1920.	1920-1921.	1921-1922.	1922-1923.	1923-1924.	1924-1925.	1925-1926.	1926-1927.
653	1,957	882	....	....	....	....	....
1,178	796	836	1,610	2,357	724	1,511	937
117,858	100,052	110,239	106,533	15,053	61,464	195,449	3,655
376,258	629,525	424,689	667,712	1,152,609	765,434	780,333	575,090
448,107	218,350	461,448	331,476	662,601	387,049	324,084	847,701
112,969	77,217	158,247	129,452	82,179	199,030	76,332	166,692
62,033	30,873	37,550	25,280	20,595	35,883	41,170	28,702
13,850	5,080	66,833	24,688	3,077	8,787	6,335	6,315
7,633	3,618	4,179	6,267	2,765	4,543	3,490	3,546
3,222	2,879	3,343	3,222	2,659	2,869	3,109	2,807
2,226	2,028	2,558	3,398	1,228	2,103	2,203	2,006
1,093	1,417	2,148	1,972	844	1,779	1,958	1,135
....	....	....	8,500	836	725	1,405	1,107
1,147,085	1,074,392	1,281,952	1,310,110	1,946,803	1,470,390	1,437,329	1,639,753
99,108	92,827	110,760	113,193	168,204	127,042	124,185	141,675
541	265	503	698	239	2	216	168
99,649	93,092	111,263	113,891	168,443	127,044	124,401	141,843
304	555	261	302	698	238	2	216
99,345	92,537	111,002	113,589	167,745	126,806	124,399	141,627

Statement showing discharges over the

Month.	Total discharge			
	1907.	1908.	1909.	1910.
	C. ft.	C. ft.	C. ft.	C. ft.
June	1,646,913,600	....	8,048,419,200	5,826,643,200
July	32,761,281,600	46,201,708,800	46,125,478,400	16,680,321,600
August	54,453,859,200	40,297,478,400	10,712,390,400	36,453,369,600
September	3,502,785,600	5,049,648,000	4,823,452,800	6,050,116,800
October	675,734,400	....	398,390,400	10,373,918,400
November	....	....	....	....
Total ..	93,040,574,400	91,548,835,200	70,112,131,200	78,384,369,600

Month.	Total discharge			
	1917.	1918.	1919.	1920.
	C. ft.	C. ft.	C. ft.	C. ft.
June	4,627,454,400	754,358,400	3,833,568,000	4,558,582,400
July	21,771,763,200	2,891,080,800	29,913,235,200	45,481,910,400
August	24,784,790,400	17,475,523,200	42,315,600,000	16,148,116,800
September	16,849,339,200	2,883,772,800	11,905,876,800	3,490,689,600
October	11,707,761,600	1,125,619,200	3,855,427,200	150,206,400
November	1,144,540,800	....	....	....
Total ..	80,885,649,600	25,131,254,400	91,823,803,200	69,824,505,600

weir at Vir from the year 1907.

of month.

1911.	1912.	1913.	1914.	1915.	1916.
C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
4,664,520,000	265,723,200	21,020,160,000	590,025,600	21,750,163,200	....
3,430,425,600	40,767,888,200	29,902,780,800	55,081,300,000	23,012,337,600	7,135,344,000
26,448,552,000	24,712,500,000	13,736,000,400	39,003,681,600	19,200,844,800	30,094,156,800
5,274,288,000	2,606,774,400	3,642,537,600	19,411,704,000	10,426,968,000	8,892,849,600
....	580,038,400	948,360,600	....	3,036,916,800	2,552,212,800
....	....	....	....	....	1,623,628,800
39,817,785,600	68,932,979,200	69,250,464,000	114,686,711,200	77,427,230,400	50,298,192,000

of month—*contd.*

1921.	1922.	1923.	1924.	1925.	1926.
C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
....	7,211,225,600	....	....	4,450,464,000	69,392,000
21,727,656,000	46,222,329,600	26,604,590,400	19,353,904,000	20,591,539,200	18,426,528,000
30,260,174,400	24,153,263,600	38,425,579,200	20,903,102,000	12,736,742,400	41,110,416,000
8,061,379,200	11,685,818,400	3,743,464,000	6,143,861,000	2,120,644,800	12,150,013,200
565,660,800	1,373,062,800	12,312,000	2,476,157,000	274,665,600	1,021,982,000
....	....	....	....	....	....
60,614,870,400	90,645,700,000	68,790,945,600	54,877,024,000	40,174,050,000	72,778,301,200

Note by the Chief Engineer for Irrigation reviewing the Annual Report of Supplies of water available for irrigation works and of the discharge from catchment areas in the Bombay Presidency for the year 1926.

The discharges recorded this year at Mithankot below the junction of the Chenab with the Indus are higher in the months of May, September and November 1926 and April 1927 than those at Sukkur. The discharges at Dera Ghazikhan and Punjnad (recorded by the Punjab Government) have been given below statement I, as was done in the case of the reports for the years 1923, 1924 and 1925.

2. The report deals with the results of observations made from the 1st May to 30th April following. The gauge and discharge curves of the river Indus at Sukkur pertain to the year ending 31st December.

3. Statements II, III and IV remain unchanged.

4. Statement No. V has been prepared on the lines of that for the year 1923. The discharges in all the rivers in Gujarat exceeded those of the last year due to the rainfall being about twice that in the last year. The discharges in the rivers in the Deccan with Ghat catchments were generally higher than those of last year due to more rainfall.

5. Of the tanks those in Gujarat had run-off greater than last year due to greater rainfall. Of the ghat-fed tanks Lake Fife, Lake Beale and Lake Whiting showed greater run-off than in the past year while Wilson Dam (Bhandardara) showed less.

6. Seven additions have been made to statement No. VII.

7. During the year under report observations for losses due to evaporation on Lake Fife and Lake Beale were not included in the report as the experiments were not reliable; no observations could be made at Waghad Tank for want of tank arrangements. Observations for the distribution of losses due to (1) evaporation, (2) leakage and (3) percolation and absorption were made on eight tanks during the year.

R. T. HARRISON,

13th October 1928. Chief Engineer for Irrigati[redacted]

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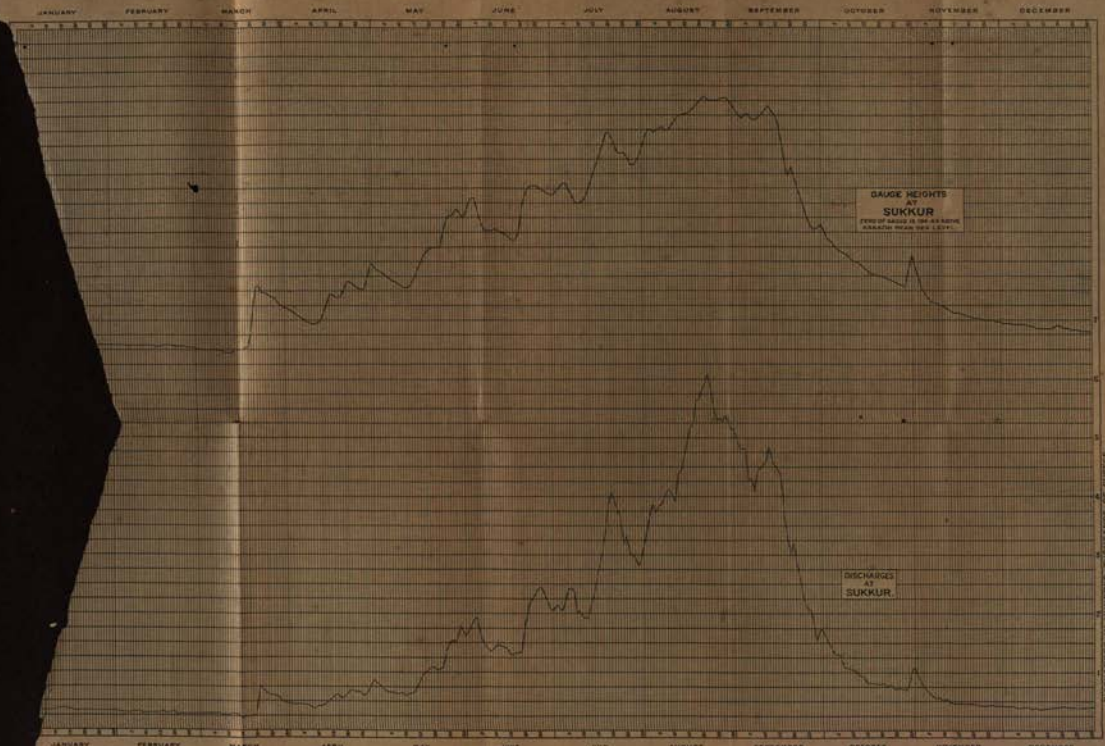

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OF
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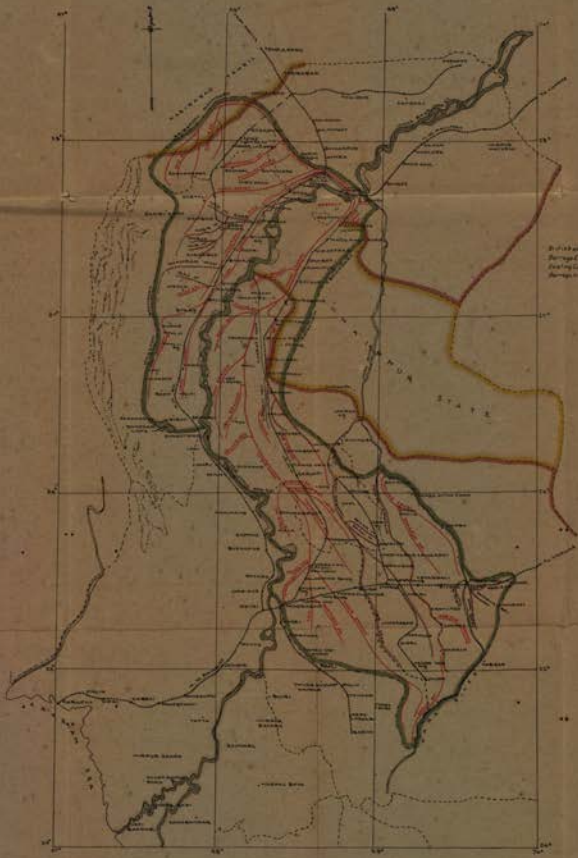

Executive Engineer
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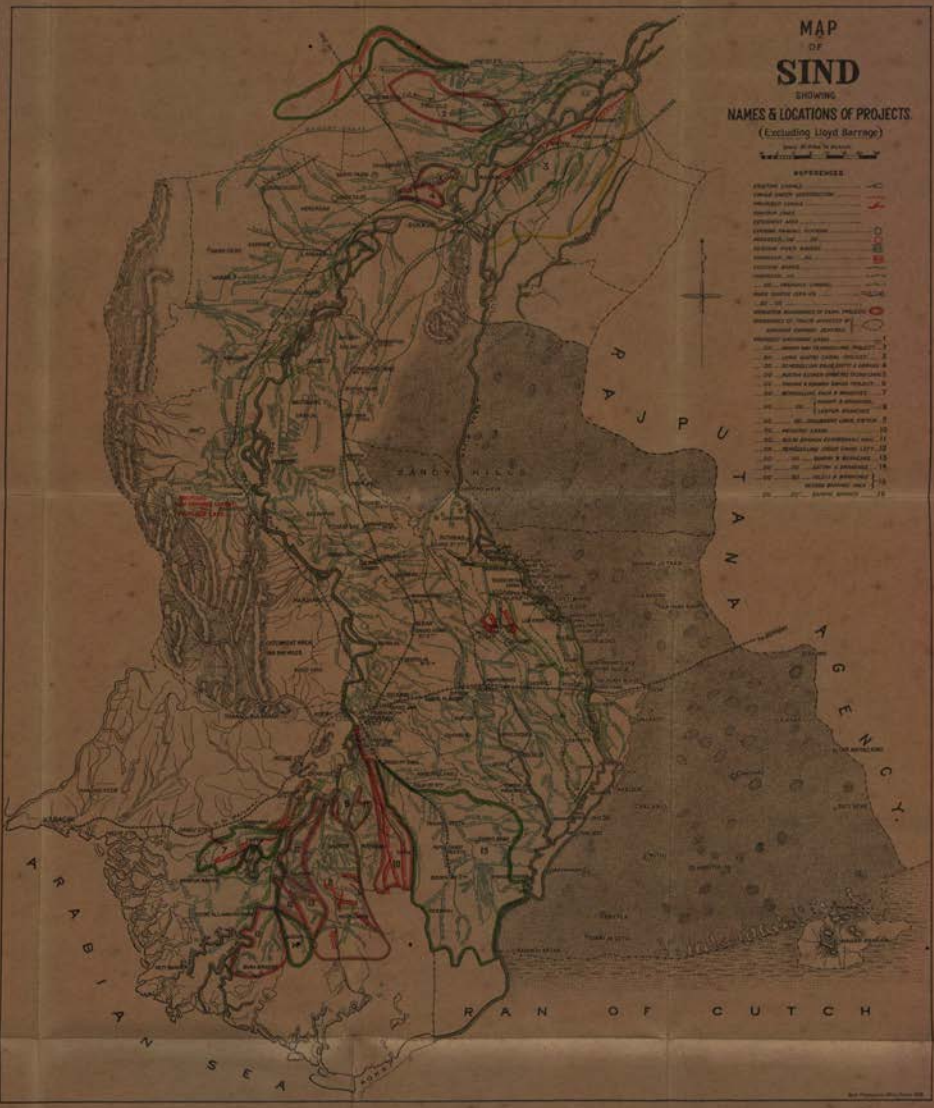
1929-30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